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Side Glances—

IN MANY centers the lights burn in public school shops into the night as schools operate on three shifts in an effort to supply semiskilled workmen for national defense. No less important than this emergency work is the industrial education program for regular school pupils. Both angles of our stepped up industrial education program—and a forecast of the future—will comprise next month's portfolio, a timely contribution to the thinking of administrators.

PUPILS and teachers fare better when transported to interscholastic games and contests in regular school owned buses. What the courts have ruled about pupils injured in private automobiles driven under school auspices will make an absorbing contribution to M. M. Chambers' regular series on school law. Watch for it in February.

"PORTRAIT of a Good School Board Member" by Dennis H. Cooke and Con T. Welch is scheduled for February publication. The rating scale devised by Cooke and Cope, first published in this magazine, has been used on 136 county school board members in West Tennessee and a number of deductions have been drawn.

ST. LOUIS has a new administrative plan that is simple, logical and practical. Homer W. Anderson, the new superintendent, will outline it next month.

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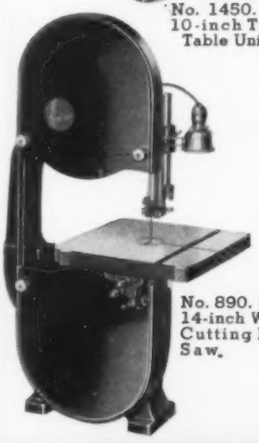

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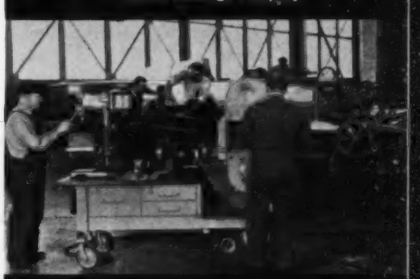

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If you should visit Tom's River, N. J., some Friday, you will find that it is washday in the high school—washday for coveralls. The boys themselves act as washladies, enjoying the experience, too, judging from their happy expressions. Instead of standing over a tub, they officiate at a washing machine—old and broken until it went through a rejuvenating process in the school's own shops. Now it works like new as do the coveralls when they come out clean and ready for another week's work.

Edgar M. Finck, supervising principal, tells us that between 20 and 24 garments are washed each week, the boys taking turns doing the work. Why is Friday chosen for washday? The reasons are that the garments are dirtiest then and they have the week end in which to dry.

Solution for clean coveralls problem.

Twelve Bus "Musts"

It is interesting—significant, too—to note the 12 rules established by the state of Iowa affecting the construction of a school bus. Here they are:

1. It shall be painted a lemon yellow color for the body, with fenders in black.
2. There shall be only one compartment.
3. A door or doors, at least 24 inches wide and 48 inches high, the lower panels of which shall be composed of safety glass, shall be placed at the front, right side, opposite the driver.
4. The front door or doors shall be under the control of and operated by the driver.
5. There shall be an emergency door in the rear at least 20 inches wide and

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48 inches high, provided with an easily operated safety catch not controlled from the driver's seat but protected from accidental release.

6. There shall be ample windows on both sides and ends.

7. There shall be ample roof ventilators.

8. It shall be heated either with hot water radiator heaters or hot air heaters, the hot air heaters to be iron pipes with all screw connections, and guarded by ½ inch meshing wire, ¾ inch from the heating element, which is located in the bus body.

9. There shall be a comfortable seat for each pupil.

10. The fuel tank shall be located, filled, drained and vented outside of the bus body.

11. Bumpers, both front and rear, shall be fastened directly to the chassis.

12. Every school bus shall bear thereon, both front and rear, a sign with the words "School Bus" in black letters at least 6 inches high, on a lemon yellow background. After Sept. 1, 1941, all school buses shall be equipped with an additional stop signal with the word "Stop" printed on both sides in black letters at least 5 inches high on a lemon yellow background. Such signal shall be at least 20 inches long and shall be manually controlled by the operator of the school bus so as to be clearly visible from both front and rear when extended from the left of the body of the bus and shall be displayed only when passengers are being received or discharged from the bus. When vehicle is not in use as a school bus, the signs with the words "School Bus" shall be covered.

When passenger cars are used as school buses, the same will apply except that it is not necessary for them to be equipped with the manually controlled "Stop" signal.

Driver Responsibility

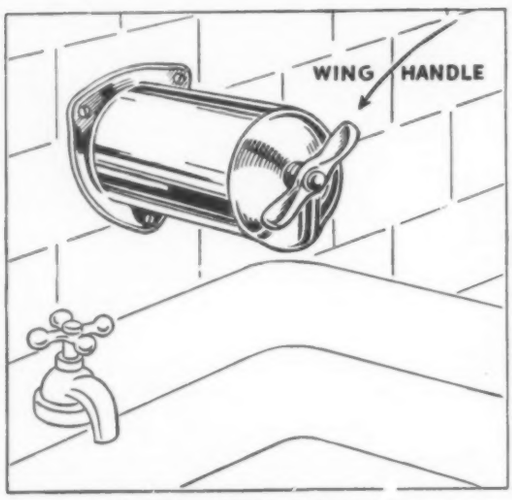
We're still in Iowa and still on the subject of pupil transportation. According to the state law, "No person under 16 years of age who is physically or mentally incompetent shall be employed to drive a school bus, nor shall any person be so employed whose personal habits of moral conduct would be detrimental to the best interests, safety and welfare of the children transported. Use of alcoholic beverages or immoral conduct on the part of a driver shall automatically cancel his contract and his reemployment for the remainder of the school year is thereby prohibited. Any school board may contract with the driver of any school bus for a period of three years.

"The driver of every motor vehicle in use as a school bus shall have a regular chauffeur's license issued by the department of public safety and, in addition thereto, each such driver shall obtain permission in writing, signed by the president and secretary of the board of the school district that he serves, and made a part of the minutes of said board; except that in the the case of a driver under the age of 18 only a limited chauffeur's license may be issued, which limited license shall be valid for the purpose only of operating a motor vehicle to transport pupils to and from school. Such limited license shall be valid for the school year beginning July 1 and ending June 30 and shall be issued under the same requirements, except as to age, as apply to the issuance of regular chauffeurs' licenses and to those 18 years of age or over.

"No motor vehicle in use as a school bus shall be operated at a speed in excess of 35 miles per hour. Any violation of this section by a driver shall be deemed sufficient cause for canceling of his contract."

The Self-Rating Scale for School Custodians that has been appearing in this department will be continued in coming issues.

YES, THERE IS A SCHOOL WASHROOM PROBLEM!



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Cake soap? Then you're paying at least double the apparent purchase price. Cake soap melts in wet wash bowls or sloppy soap dishes; little pieces are invariably discarded; whole cakes vanish. More daily cash waste!

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LOOKING FORWARD

Happy New Year

NINETEEN hundred forty-one offers unusual opportunity for the public schools to increase the effectiveness of their contribution to the community, state and nation. The crisis through which we are passing demands extra effort from the schools in preparing children, youths and adults for an understanding of the serious problems confronting us and in developing a strong solidarity in meeting these problems willingly and courageously.

The first spasm of fear that settled over our land with the fall of the continental democracies has passed. Out of it has come a grim determination on the part of the American people to defend their way of life and the right to live in security under law. The schools may do much to clarify the values of the democratic way of life and to promote individual optimism as to the final outcome.

Unusual effort may be required of every member of the teaching profession. There is no doubt in our minds that the teaching profession will rise to this emergency and acquit itself as ably as it has in other grave crises, quietly doing its share so that freedom and liberty shall not perish from the earth in this generation. We cannot afford to permit the spread of hatred and intolerance for, after the storm, our efforts must be devoted to helping a sick world.

A Good Record

CRITICS of public education are likely to pick out the social and moral weaknesses of individual educators and then to proceed to generalize for the entire teaching profession. While this tendency is strictly a minority practice, many educators resent its implications. While their resentment is easy to understand, we fail to develop much heat about it. Sin always stands out more prominently than virtue as news value. When a single year produces a quartet of such professional unworthies as James G. Reardon (Massachusetts), Henry Joseph Gerling (Missouri), James Monroe Smith (Louisiana) and Verlin Spencer (California), there is bound to be vivid publicity. The teaching profession suffers somewhat from the popular reaction.

We might assume that, in addition, 500 more individuals have been found unworthy under circumstances that have given them better protection from publicity. There are approximately one million teachers in this country. A failure of less than 0.5 per cent in any one year must be considered extremely low. The record of the teaching profession as a whole for unselfish service, under conditions that are frequently trying and extremely difficult, is excellent. There is no need to worry about a few who fall by the wayside. If the organized teaching profession acted vigorously by disbarment from membership in professional groups whenever major unethical practices were discovered and if it made these decisions public, the people would regard the teachers with increased confidence.

Textbooks

MORE than 5000 different textbooks are used in the public and nonpublic schools of the United States. In addition to conventional texts, considerable free supplementary material is produced by governmental agencies, state educational authorities and special interest groups. Much of the material developed by special interest groups is specifically propagandistic; some of it is good.

Textbooks are adopted in accordance with specific statutory regulations in 48 states. Twenty-five states have statutes requiring the use of uniform textbooks either for the state as a whole or within schools of specified grades. Twenty-three states permit choice of textbooks by the local board of education. In all of the states the people, either directly in certain small districts or indirectly through community or state representative agencies, actually determine the choice of instructional material. Most of these adoptions are made upon recommendations of the teaching personnel.

The textbook is the most important teaching tool in American education. It is written by independent educators and educationists, sometimes to a publishing pattern, frequently to a specific large city or state course of study and more frequently in terms of the possibility of extent of use. Textbooks are written for use by teachers and must be acceptable and of use to them. The author's work is specifically conditioned by his audience. Since the schools are fundamentally conservative and academic, the publisher generally exercises a significant influence in determining the general content of a book so that its appeal may be wide.

The great majority of school textbooks are published by corporations, composed largely in their managerial aspects of former members of the teaching profession. These corporations have been in business many years and have achieved an excellent record in their services to the schools. As a result of all of these factors, plus a quarter of a century of personal experience, this generalization may be made. American school textbooks on elementary, secondary and advanced levels are not radical but incline more frequently to scholarly conservatism. Their treatment of different subjects varies directly with the maturity and discrimination of the audience.

In recent months a campaign has been carried on by a special interest group against a few social studies textbooks. The crime committed by the author in his publications appears to be that he told the truth! This truth offended certain interests and conservator groups. Instead of presenting the issue clearly to the people and boards of education, the interest group stimulated certain writers whose ability is available for hire to produce articles which appeared in *Liberty* and the *American Legion Monthly*. These writings painted a dire and completely untrue picture of the American public schools as being actively engaged in the teaching of subversive doctrine, namely, communism. This "smear" campaign is one of the most vicious in recent years but, fortunately, the people are better prepared to combat propaganda of this sort. The editorial efforts of many newspapers have also helped minimize this program of defamation.

In addition to their publishing activities, certain conservator groups were whipped into a frenzy within certain communities. In many such storm centers the witch hunters were laughed out of court upon an objective review of their charges by parent groups.

American textbooks are distinctly not radical. Neither are the teachers nor the schools nor the communities in which these textbooks are used. Taken as a whole, textbooks represent an unusually fine scholarly and mechanical production. The people of each school community through their representatives on the board of education and with the help of recommendations from the teaching profession are perfectly capable of selecting textbooks for the education of their children.

Elementary School Trends

DEVELOPMENTS in elementary education during the last five years tend to follow the trends established during the first three decades of this century. There has been a marked continuation of progress toward individualization of instruction. Excessive publicizing of the more emotional practices of so-called progressive education have, unfortunately, overshadowed the slower and more vital movement toward a saner consideration of child training. One-sided concepts that the school exists solely for the child or that the child exists solely for the school or society have gradually given way to the more balanced belief that both the individual and social factors must be given balanced consideration. The educational process itself has broadened in its practice to include the physical and social as well as the mental aspects of personality growth.

Cautious experiments toward a more flexible classification system, still within the rigid shell of the graded system, have been made in many progressive centers. The classification of the child physically, mentally and socially by means of a developmental or promotional unit extending two or three years, instead of being measured in rigid half grades, offers new possibilities. This experimentation has required patience and careful administration so that institutional or community tradition might not develop an active opposition.

There has been a distinct trend toward a more sensible consideration of the importance of elementary teaching in relation to secondary education. In several states the teacher training period has been extended to the completion of four years of general and professional education beyond the twelfth grade.

The so-called activity movement, which is primarily a method and not an administrative device, has given new life to the teacher-classroom form of administrative organization. The trend toward departmentalization appears to have stopped. It has even been modified considerably in centers that in the earlier stages of this movement practiced departmentalization in the primary as well as in the postprimary years. Departmentalization appears to be reaching a point of stabilization.

These instructional and administrative trends also have been reflected in better buildings. More elementary schools today are being designed in terms of the total educational needs in site and building. There has been a greater tendency toward the use of educational specialists in solving the technical problems and in coordinating the work of the landscape and building architects. Site development has not developed to the desirable point but the importance of the landscape architect is being better recognized than before. The influence of the activity movement is reflected in the development of the generalized classroom. There has also been a trend toward a more functional architectural design. The better buildings obtain their total effect through clean design, good balance and massing. Special attention has been paid to increased safety of life, to noise reduction and to improved natural and artificial lighting. These trends indicate a healthy condition in elementary education.

The Editor

Portfolio of ELEMENTARY SCHOOLS

Elementary Education Grows

THE public school should strive to lead each individual to a better way of living; to cultivate individual growth, plus an abiding sense of responsibility for the progress of all; to realize the American dream of a nation of individuals with a social conscience.

What does the school contribute toward wholesome individual growth and what does it contribute toward the development of responsibility to promote the general welfare? Every educational institution from kindergarten to university would do well to test itself constantly by these two standards.

Evidence that schools are becoming sensitive to such responsibilities as these is furnished by recent educational trends, five of which may be stated as follows: (1) toward simplicity of organization and method; (2) toward better understanding of the individual child; (3) toward cultivation of character; (4) toward a dynamic curriculum, and (5) toward closer teamwork with the community.

Representative of atmosphere found in modern elementary schools is this first grade room at the Central Washington College of Education, Ellensburg.

We do not always appreciate how much our thinking is dominated by machine age concepts. We believe, for instance, that through some happy change in the machinery of municipal government we can eliminate graft and corruption or that by currency manipulation we can undo our economic ills. In like manner, we educationists have sometimes accepted mere amplifications of educational machinery as remedies for educational ills, mistaking much whirring of bearings and purring of gears for educational effectiveness. Recent developments, however, are in the direction of the simple and flexible school program. The "activity" movement may be interpreted as a reaction against the mechanized time schedule so much in vogue a few years ago.

The fetish of the device also has been upheld for worship by countless authors and publishers. Both "methods" and "work books" have a place when their use is dictated by intelligent purpose. The liability arises when they become the means of arresting thought rather than of stimulating it. Educational gadgets happily seem on the way out.

School marks represent another mechanistic concept that we need to survey from the standpoint of purposes. They should provide the school with valuable records for child guidance. They should provide Johnny's parents with definite information as to how he progresses. They should help Johnny to discover strengths to be cultivated, weaknesses to be overcome, achievements to give renewed courage. They have no validity either as penalties or as rewards. The present trends away from the mechanistic school mark are illustrated by many current reactions, ranging all the way from the descriptive analytical report to an occasional note from teacher to parents.

Trends toward the integration of subject matter and the reorganization of school life are typical reactions to the machine concept of the educational process.

The new education for children will be consciously exploratory. There is no good reason why the "broadening and finding" functions should be restricted to secondary school levels and there are many reasons why they should not be. It should be clearly understood, however, that the goal is not vocational choice.

With the progressive elimination of children and youths from gainful occupations, the urgency of choosing a career early in life has lessened. For the young this reprieve, as it were, from the call of the factory and the market place is fortunate. More time is granted for the discovery of how to live and the elementary schools can participate in promoting the general welfare in no more effective fashion than by orienting themselves to this responsibility.

Broader conception of character education is indicated by two recent yearbook studies. The American dream of a nation of socially responsible individuals predicates a character-centered school. Character education in America is the mastery of a democratic way of living.

The whole life of the school must be viewed in terms of its potential contribution to the democratic way of living. There must be organized

Simpler and More Flexible

WORTH McCLURE
Superintendent, Seattle, Wash.

teamwork by the teaching staff in pooling experience and capitalizing opportunities so that alert minds will see into all sectors of school life. The new concept of character education is in reality one of wholesome personality development. New force and meaning are given to the rôle of guidance in the education of children by this concept.

The fundamentals of 1970 are not likely to be those of 1940, and the school must give children some acquaintance with what have been called "the technics of progress." It can show them simple economic and social processes that are operative in their own community, can stimulate interest in challenging problems and can give some experience in individual and group study technics.

At the very threshold of the school are acres of neglected diamonds in the way of natural resources. More and more the "go-and-see" idea takes children into the community for first-hand experience, and more and more visual aids and radio bring the world to school.

Command of critical reading technics is essential. It is easy to see this in the interests of national defense. Contacts with a great many books and periodicals, the development of wholesome standards of reading taste, the discovery of reading interests, acquaintance with reference materials so that differing points of view may be obtained and evaluated, the diagnosis and remedial treatment of individual difficulties and independent habits of thought must all continue to be prime essentials of any forward-looking program. The library is an essential feature of the elementary school.

Enlargement of mathematical experience, encouragement of originality in quantitative thinking, liberation from dependence upon quantitive statements of others are as thoroughly essential as are recent advances in the field of reading mastery. In a technological culture, mathematics must be cultivated as an instrument of social progress. The schools must reverse current trends and must increase rather than diminish the mathematical experiences of children.

Handwriting appears likely to continue to be a social convenience rather than an economic necessity and typing has begun to challenge the attention of teachers. Shifting emphasis upon social needs must govern the intensiveness and general character of instruction in writing with a wise degree of latitude for individual needs.

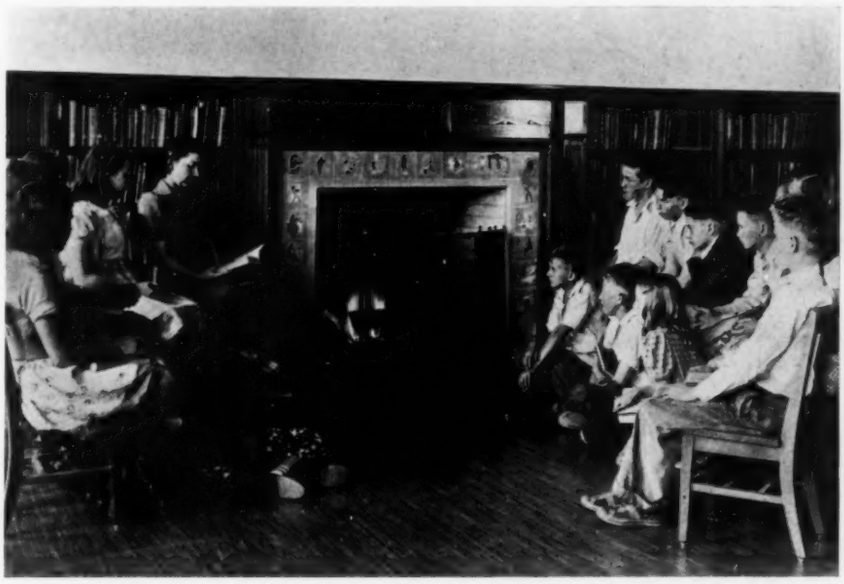
The family is already on the way to closer understanding with the school in the trend toward parental education. Educational leaders must encourage this trend.

Development of public sentiment for intelligent control of motion pictures, the radio and other commercialized amusements as they affect the welfare of children is direly needed. The effort for its achievement will be another means of bringing into closer teamwork all community agencies seeking the welfare of children.

Educational leaders will do well to regard problems of this kind as opportunities for promoting eventual coordination to the end that more and more the sum total of extra-school experience of the child shall be articulated with school life and that both shall be dominated by socially constructive motives. The school's program and its facilities alike must contemplate its participation in the process of community advancement.

The new school of democracy will take form out of the purposes that constitute the "American dream." Its philosophy will be constructive, not one of mere suppressive dissent. Its organization will be simple, attuned carefully to its purposes. Its daily life and discipline will be continuously adapted to evolving concepts of democratic aims. The community will be a part of this school. It will bring reality into school experiences and the school will extend educational influences into the community.

In building this new school none may share more richly in enlarged vision of service than the teaching staff, which will be led in cooperative endeavor by socially and professionally enlightened principals.

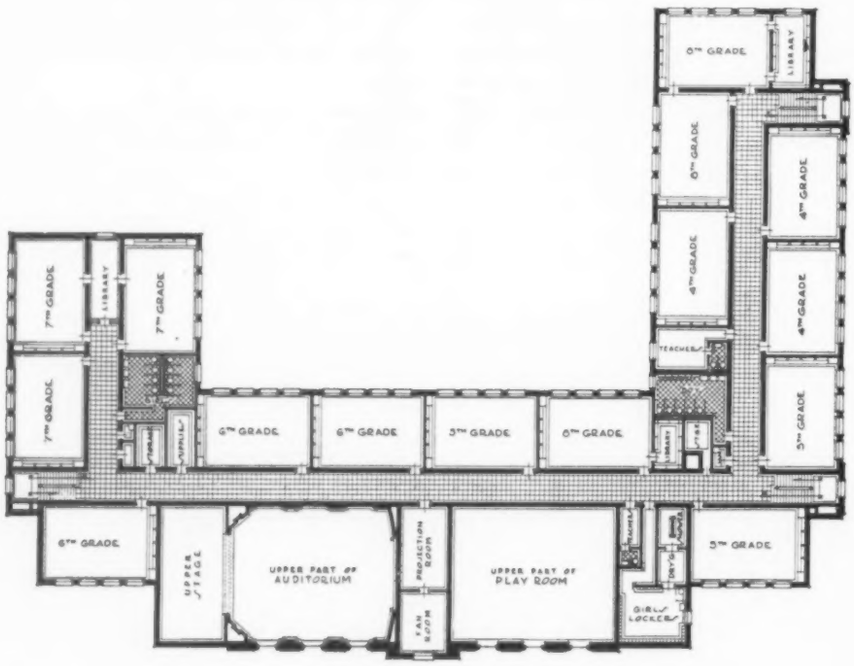


The fireplace in the library is an intriguing center for the story hour in the laboratory school of the Central Washington College of Education.

In planning Montpelier's elementary building it was possible to provide several features that most school boards feel they cannot afford in small buildings of six or eight rooms. In the school there is a special room for music and art, equipped with 10 four pupil tables and 40 stools, making a satisfactory art studio. Folding chairs convert it into a music room. Another feature is a manual arts room. At one end there is modest equipment for homemaking and at the other are four woodworking benches, a lumber rack and a tool cabinet. Administrators of the Montpelier school believe in a "middle of the road" philosophy of education. The child is not a sack to be stuffed with facts.

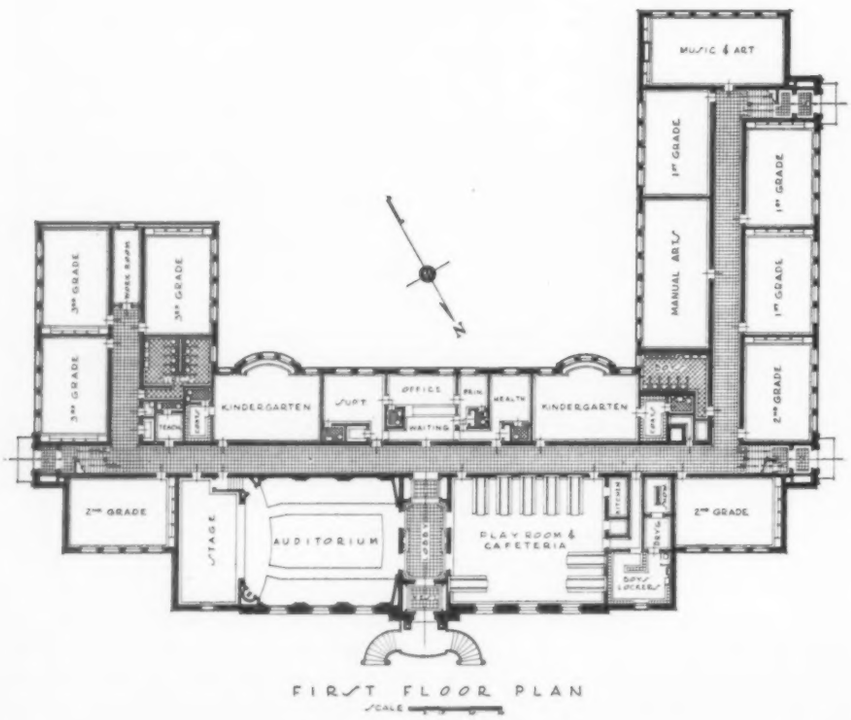
Superintendent: W. A. Kincaid

Architect: Robert R. Graham



SECOND FLOOR PLAN

SCALE



FIRST FLOOR PLAN

SCALE

Construction Details

STRUCTURE: Foundation and basement, concrete. Superstructure, 4 inch brick and 8 inch terra cotta with limestone trim. Outside walls furred with steel wall furring and metal lath. Interior bearing walls, solid brick. Partitions, terra cotta block. First and second floor construction, reenforced concrete. Roof construction, bar joists and steel beams with precast gypsum plank.

ROOF: Twenty year bonded slag and gravel. One inch insulation board on roof slab.

FLASHING: Two way 16 oz. copper flashing used throughout at all floor levels, window sills, window and door heads, spandrel beams and below all coping.

WINDOWS: Double-hung wood sash and frames.

FLOORS: Classrooms, strip maple. Gymnasium, strip maple. Corridors, toilets, locker and shower rooms, terrazzo. Kindergarten, linoleum. Auditorium, cement and mastic tile. Administration rooms, mastic tile.

WALLS: Gymnasium, wainscoted with cork tile, walls plaster. Toilets, wainscoted with cement, metal toilet partitions and doors. Showers and drying rooms, wainscoted with marble. Corridors, wainscoted with ceramic glazed structural tile units. Entrance lobby, wainscoted with marble.

COLOR SCHEME: Corridors, floors two shades light green terrazzo, wainscot light green, walls cream, ceiling cream acoustical plaster. Toilets, green partitions and wainscot, walls and ceilings light green. Showers and drying rooms, Vermont marble wainscot, ivory walls. Classrooms, unpainted. Gymnasium and auditorium, buff walls, cream acoustical plaster ceilings.

CEILINGS: All ceilings except classrooms and storage, acoustical plaster.

HEATING AND VENTILATING: Low pressure vapor heating system and unit ventilation system under thermostatic control. Direct radiation, enclosed copper convectors.

PLUMBING: Drainage, cast iron, galvanized steel and wrought iron pipe. Water supply, copper and brass pipe.

ELECTRIC SYSTEM: Gymnasium, flush recessed ceiling lights. Classrooms, semi-indirect units. Administration and kindergarten, illuminous indirect units. Lighting of classrooms controlled by electric eye. Radio and public address system in all rooms. Electric clock, program and fire alarm system.

CLOTHING STORAGE: Metal built-in wardrobes.

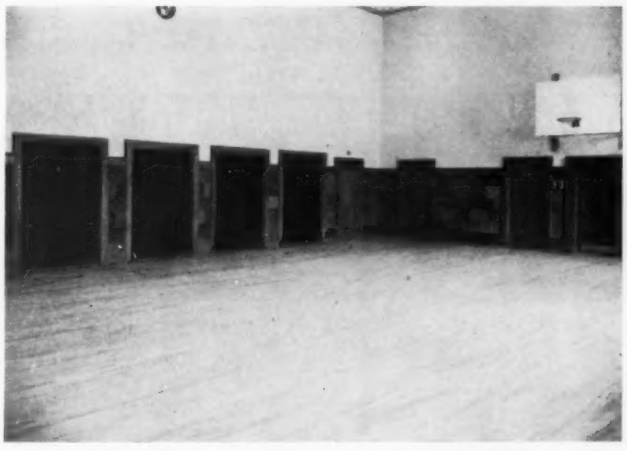
EQUIPMENT: Stage completely equipped with footlights, border lights and dimmers and curtains. Cafeteria, recessed folding tables. Office, metal furniture.

MONTPELIER ELEMENTARY SCHOOL, MONTPELIER, VT.

Since 1858 Montpelier's elementary schools have been centralized. The present building replaces two older structures.

The elementary school's two kindergartens and 24 classrooms serve all the children of the city who attend a public elementary school. Kindergarten bay window is shown above.

In the Montpelier school the gymnasium and auditorium are separate rooms. The auditorium is kept in service most of the time by classes preparing and producing programs.



The gymnasium, or playroom, is in use the entire day and for an hour or more after school. It is converted into a cafeteria during the lunch period by means of eight tables for food service which fold into the wall when not in use.

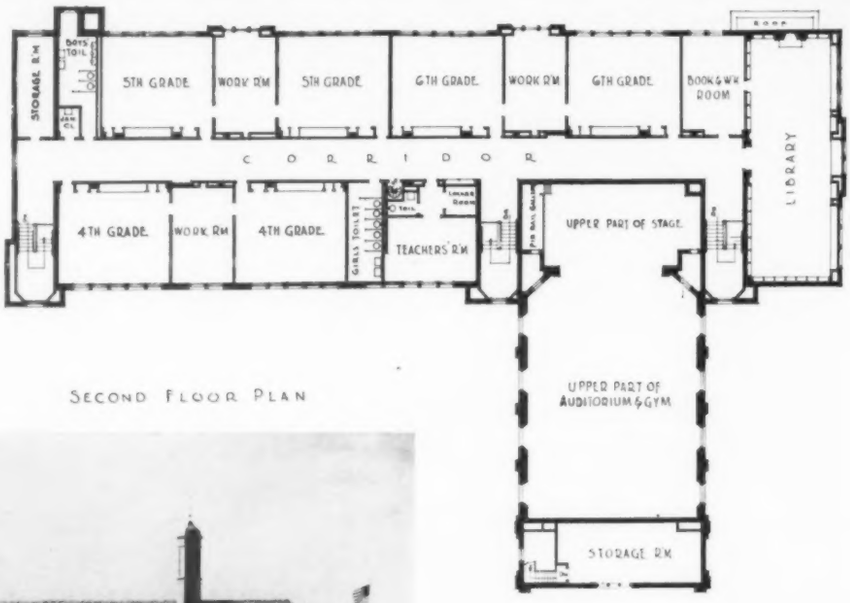
The cost of providing eating facilities for the 125 to 150 pupils who stay for lunch, when added to the cost of the small kitchen, represents less than twice the price of ordinary cafeteria furniture. Above: Cafeteria tables are unfolded for lunch.

NEW YORK REGION

Superintendent: Vinal H. Tibbetts

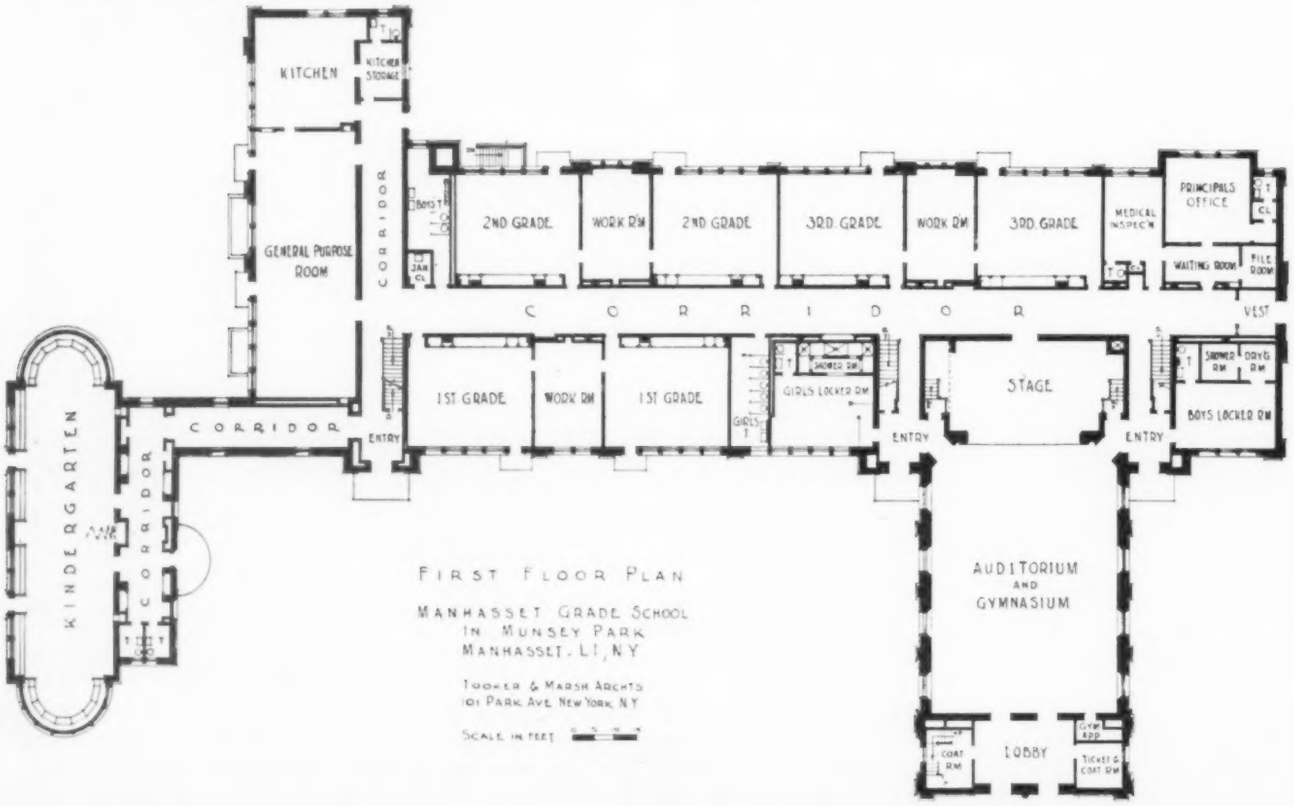
Architects: Tooker and Marsh

Below: The Munsey Park Elementary School is located on a 10 acre site that was purchased 10 years ago by a far-sighted board of education that foresaw the need for expansion of facilities in this rapidly growing community.



SECOND FLOOR PLAN

Nearly a year was spent in perfecting plans for this school. Architects were instructed to work in close collaboration with the superintendent and faculty to the end that this building might be functional in meeting the needs of a progressive elementary program and an expanding community.



FIRST FLOOR PLAN

MANHASSET GRADE SCHOOL
IN MUNSEY PARK
MANHASSET, L.I., N.Y.

TOOKER & MARSH ARCHTS
101 PARK AVE. NEW YORK, N.Y.

SCALE IN FEET

Construction Details

STRUCTURE: Foundations and basement, concrete. Superstructure, solid brick with portions of upper story, stuccoed. Trim, stone and oak. Outside walls, furred with steel furring. Interior walls, steamed cured cinder block.

ROOF: Pitched roof, constructed of wood and finished with slate.

WINDOWS: Generally wood of counter balanced type. Combination auditorium and gymnasium, steel sash with wired glass eliminating wire guards.

FLOORS: Corridors, kitchen and locker rooms, quarry tile. Toilets, ceramic tile. Kindergarten, rubber tile. Auditorium and gymnasium, selected clear maple strip flooring. Classrooms, asphalt tile laid with border and checkerboard pattern in field of two contrasting colors.

WALLS: Combination auditorium and gymnasium, cork wainscot with plaster above. Corridors, glazed terra cotta wainscot, plaster above. Toilets and service rooms, glazed colored tile wainscot, plaster above. Kindergarten and general purpose room, cork dado, plaster above. Classrooms, plaster. Color scheme, generally shades of brown for trim with various pastels for plaster walls.

CEILINGS: Toilets, service rooms, plaster. Corridors, auditorium, classrooms, acoustical plaster.

HEATING AND VENTILATING: Direct radiation with ventilation by means of ventilating units. All thermostatically controlled. Low pressure steam, vacuum system.

ELECTRIC WORK: Intercommunicating telephone system, provision for sound movies in each classroom. Master time clock and buzzer system for each classroom, fire alarm system, semi-indirect lighting.

PLUMBING: Separate toilets for both boys and girls on each floor; automatic seat action closets with flush valves, open lip type seats, vitreous china used throughout, individual fire extinguishers (one for every 2500 square feet) doing away with stand pipes and uncertainty of condition of fire hose.

WARDROBES: Recessed metal wardrobes for pupils' clothing.

BLACKBOARDS AND CHALK BOARDS: Genuine black slate and cork boards in each classroom.

Above: Kindergarten children being weighed in the school's health room. Right: Science experiment being conducted in one of the workrooms, which are a notable feature of this building. Each workroom serves two adjoining classrooms; on one side is a bench for work in clay; on another, a woodworking table; on a third side, an adjustable cork board for fine arts work, and on the fourth side are a science bench, drawers and cupboards. Below: Scene in front of the library fireplace.

SOME ten years ago the then existing Manhasset board of education, exercising rare perspicacity and vision, induced the taxpayers of the community to purchase some 10 acres of land in an outlying and uninhabited area of the school district as a site for a new school when conditions warranted.

With the unprecedented growth taking place in this community during the past several years and particularly in the section of the community

mentioned, it became evident several years ago that a new school should be built upon this site. The firm of Tooker and Marsh was appointed architects and was instructed to work in close collaboration with the superintendent and the faculty of the school to the end that this building might be thoroughly functional in meeting the needs of a progressive elementary school program.

Nearly a year was spent in perfecting plans. The first spadeful of earth was turned in October 1938 and the building completed in September 1939. The cost for the building and equipment of $387,000 was shared by the local taxpayers and the Public Works Administration at a ratio of 55 and 45 per cent, respectively. In the opinion of many educators and architects this building is an outstanding example of careful pioneering to the end that it completely serves the program of education carried on within its walls.

The building is of English design, two stories in height. It contains a large kindergarten, which can be used for two groups at one time by virtue of folding doors; 12 classrooms for grades 1 to 6, inclusive; six workrooms, each serving the two adjoining classrooms; a general purpose room, which may at some future time be used for a cafeteria, adjoining a kitchen with large storeroom; a combination auditorium and gymnasium; a library with an adjoining workroom; a teachers' room; a large stock room; locker rooms for both boys and girls, and a principal's office placed next to a room for health activities and served by a common waiting room. In the basement are a janitor's room, carpenter's workshop, boiler room and an electrical control room.

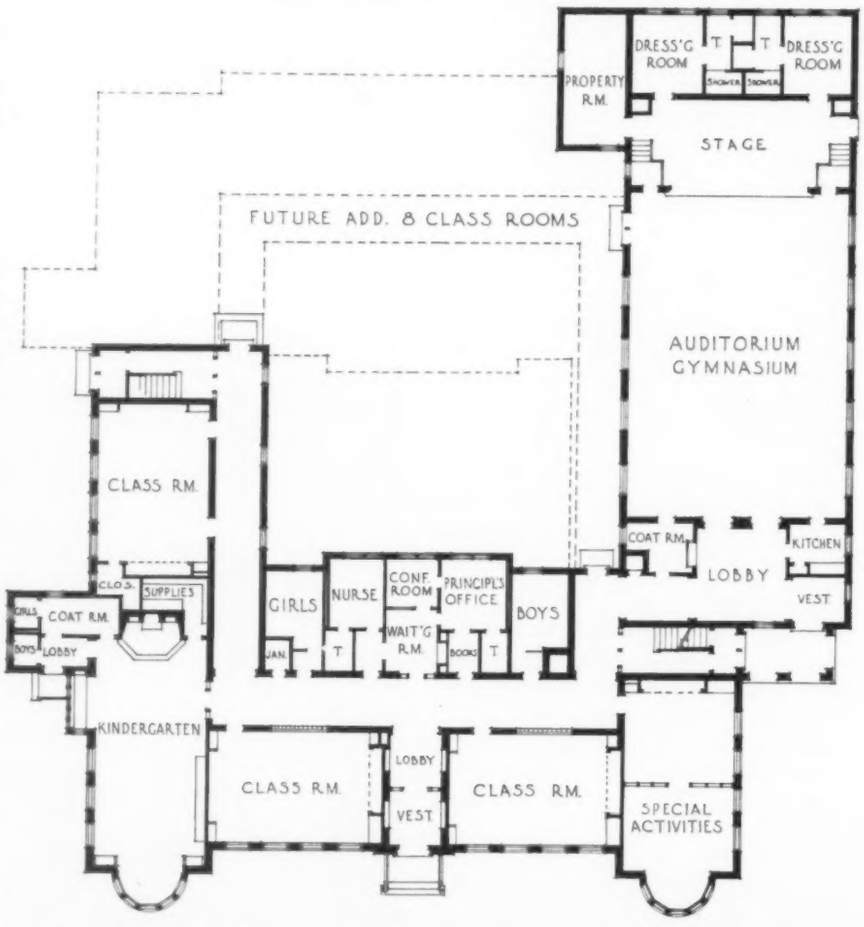
Each classroom, with the exception of the kindergarten, is 30 by 22 feet. On one side are four large windows and all rooms on the first floor have a French door which opens onto a terrace and lawn. On the opposite side of the room are children's lockers, a large locker with shelf and mirror for teacher's personal use, a large storage closet with deep shelves, a book closet and a smock closet. On the door of each locker and each closet is a bulletin board.

The third side of the room is completely covered with cork bulletin boards, one stationary near the ceiling for finished murals and three adjustable sections below that may be used as easels as well as bulletin boards. On the fourth side of the room are a blackboard, two windows and a door to the workroom; the windows are equipped with shades. Each classroom is equipped with individual tables and chairs of various sizes. Instead of the usual teacher's desk each room has a table and filing cabinet for the use of the teacher.

The workrooms previously mentioned are a notable feature of this building. As previously stated they are located so that each one serves two adjoining classrooms. Each measures 17 by 33 feet. On one side are a bench and appurtenances for work in clay; on another, a woodworking table equipped with several vises, tool racks and tools with an ample supply of drawers and shelves. On a third side is an adjustable cork board for fine arts work and on the fourth side are a science bench, drawers and cupboards. The science bench is equipped with gas, electricity and running water.

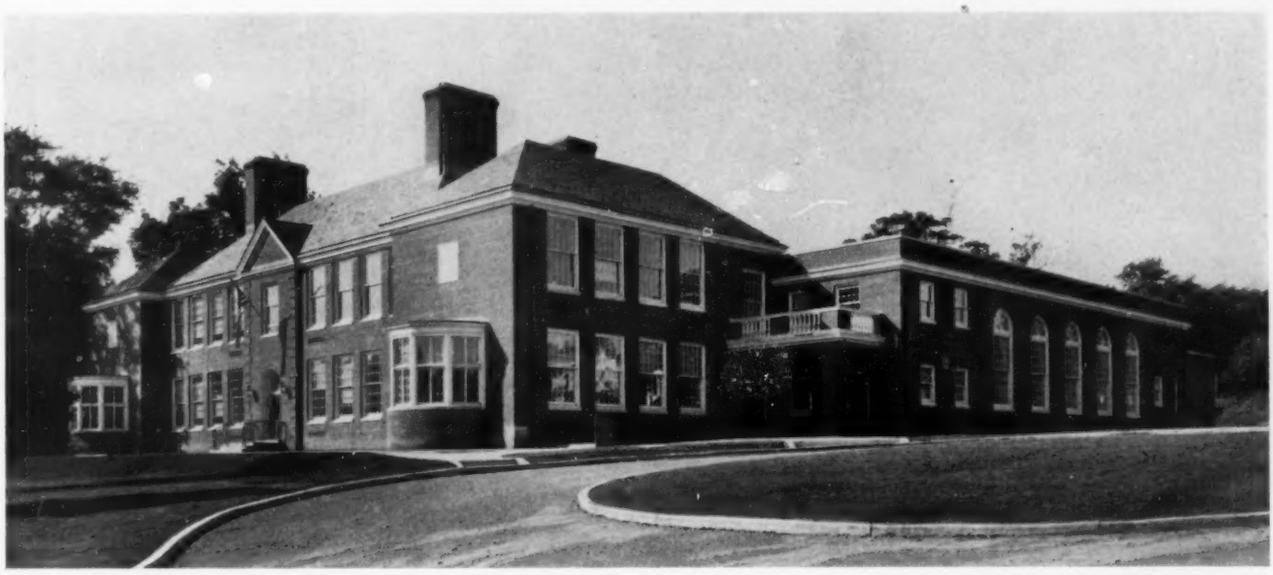
The halls are fully equipped with bulletin boards and display closets and the color scheme throughout the building has been kept to pastel tints adapted to sight saving and the esthetic.

Sheffield Arnold of New York City, the landscape architect, has provided plans for the development of the playground space by providing the following features in order that it may serve not only the children but the adults in this fast growing section of Manhasset: a large kindergarten playground space; a parking area for automobiles, and a parking area for bicycles. The features just mentioned already have been provided.



Above: The first floor plan of the Malcolm S. Mackay School, Tenafly, N. J.

MALCOLM S. MACKAY SCHOOL, TENAFLY, N. J.



Construction Details

STRUCTURE: Foundations, concrete. Exterior walls and bearing walls in first and second floors, brick. Roof framing, steel throughout.

ROOF: Slate on the pitched roofs on precast slabs on steel rafters; 20 year bonded composition roofing on precast slabs on the flat roofs.

WINDOWS: Steel casement windows in kindergarten and bay windows; wood windows with double hung sash elsewhere.

FLOORS: Corridors and stair halls, terrazzo. Combination assembly room-gymnasium and stage, wood. Toilets, shower and locker rooms, tile. Asphalt tile elsewhere. Precast terrazzo treads on stairs.

WALLS: Corridors, stair halls, combination assembly room-gymnasium, wainscots of ceramic glazed brick. Toilets, shower and locker rooms, ceramic glazed brick full height. All plaster walls are tinted, with wainscot and upper walls in two different tones. Interior doors and pupils' wardrobes, birch veneered, stained. Wood trim, painted. Administration offices, wall paper. Library, knotty pine wainscot.

ACOUSTICAL TREATMENT: Ceilings of library, corridors and combination assembly room-gymnasium, acoustical tile.

HEATING AND VENTILATING: Oil burning equipment. Direct radiation throughout, with units in classrooms. Hand controls in the various rooms.

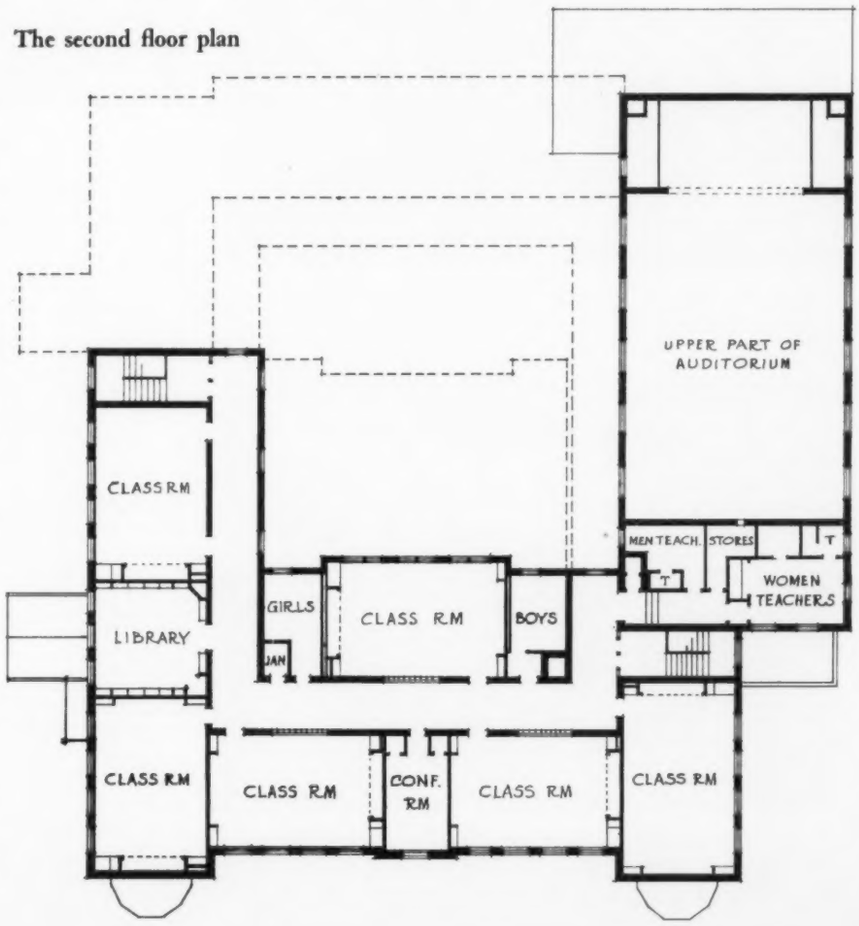
PLUMBING: Pupils' toilets, both floors. Lavatory in each classroom. Shower rooms back of stage. Drinking fountains in two locations in both corridors.

LIGHTING: All lighting fixtures, new types. Flush ceiling fixtures in library, corridors, assembly room. Hanging fixtures in other rooms. Panels of glass blocks in walls between corridors and classrooms for borrowed light in corridors.

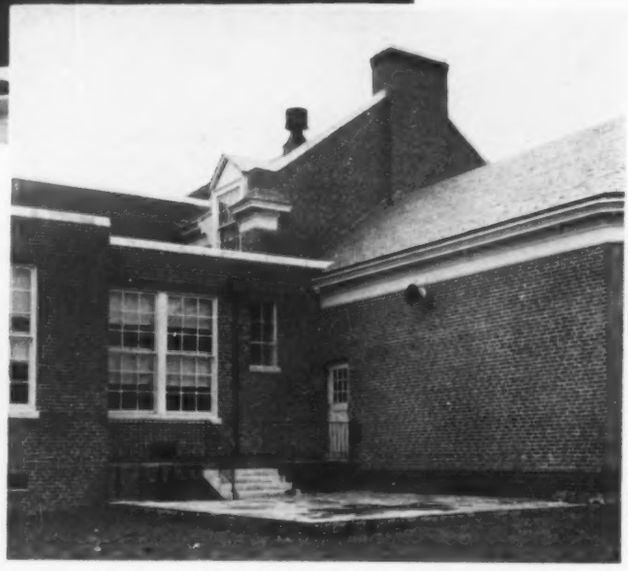
Supervising Principal: George A. Kipp Architect: Lawrence C. Licht

Above: Exterior view of the Malcolm S. Mackay School shows the brick and slate construction of walls and roof. Special features of this building are: kitchenette unit in women teachers' room and in the serving room adjoining assembly rooms; storage for assembly room chairs under stage floor; large property room adjoining stage, and an inter-telephone system.

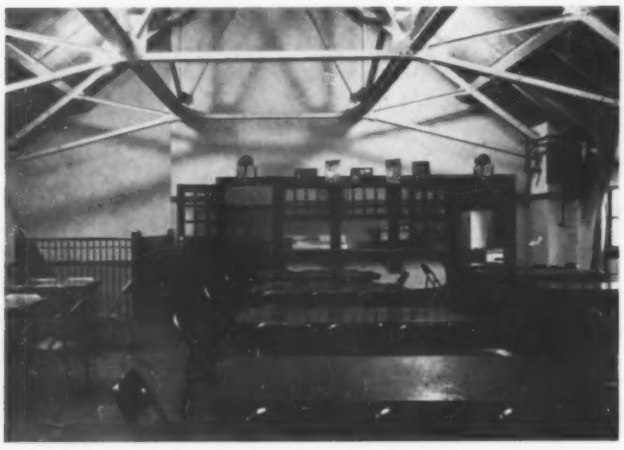
The second floor plan



Left: Front elevation, George Mason Elementary School at Alexandria, Va., a suburb of Washington.



Right: Paved terrace with direct outside connections to classrooms 1 and 4; loud-speaker connected to central sound system. Terraces are designed for outdoor work by lower grade pupils.



Above: A section of the cafeteria and kitchen in the background. The cafeteria floor plan is shown on opposite page.

Above: The interior of classroom 2, showing provisions for window seats with pupil storage and informal arrangement. Each room also is provided with folding blackboard easels.

Outline of Construction Details

STRUCTURE: Foundations and basement walls, concrete to finished grade. Superstructure, solid brick walls using sand mold face bricks. Outside walls, waterproofed with dampproofing compound, formed through copper flashings and reenforced fabric flashings. Structure for floors, steel joist with reenforced slab over; for roofs, steel joists over classrooms, clear span trusses over auditorium, and steel trusses over cafeteria.

ROOF: Reenforced gypsum for flat roofs and slate on pitched roofs. Flat roofs covered with twenty year bonded pitch and gravel roofing.

WINDOWS: Classrooms, double hung, gulf cypress. Auditorium, fixed glass blocks.

FLOORS: Classrooms 1 and 3, linoleum; other classrooms and auditorium, mastic. Toilets and alcoves, quarry tile. Terraces, slate flagstones.

WALLS: Auditorium and corridors, wainscoted with salt glazed tile; toilets, salt glazed tile throughout.

HEATING AND VENTILATING: Unit ventilators with thermostatic control in all classrooms. Air conditioning with central plenum for auditorium.

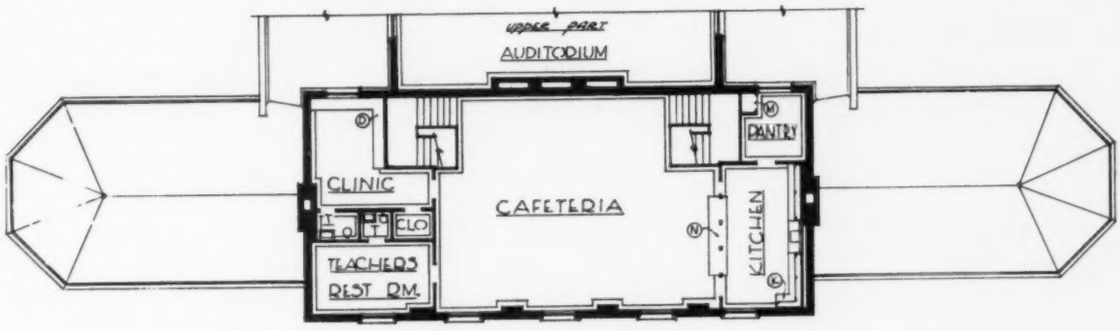
ACOUSTICAL TREATMENT: Auditorium, corridors and cafeteria, treated with acoustical tile cemented to plaster.

CAFETERIA: Cafeteria, clinic and teachers' rest room utilize the space on the second floor over the central front portion of the building. In addition to the window lighting, the cafeteria is provided with a skylight on rear slope of roof.

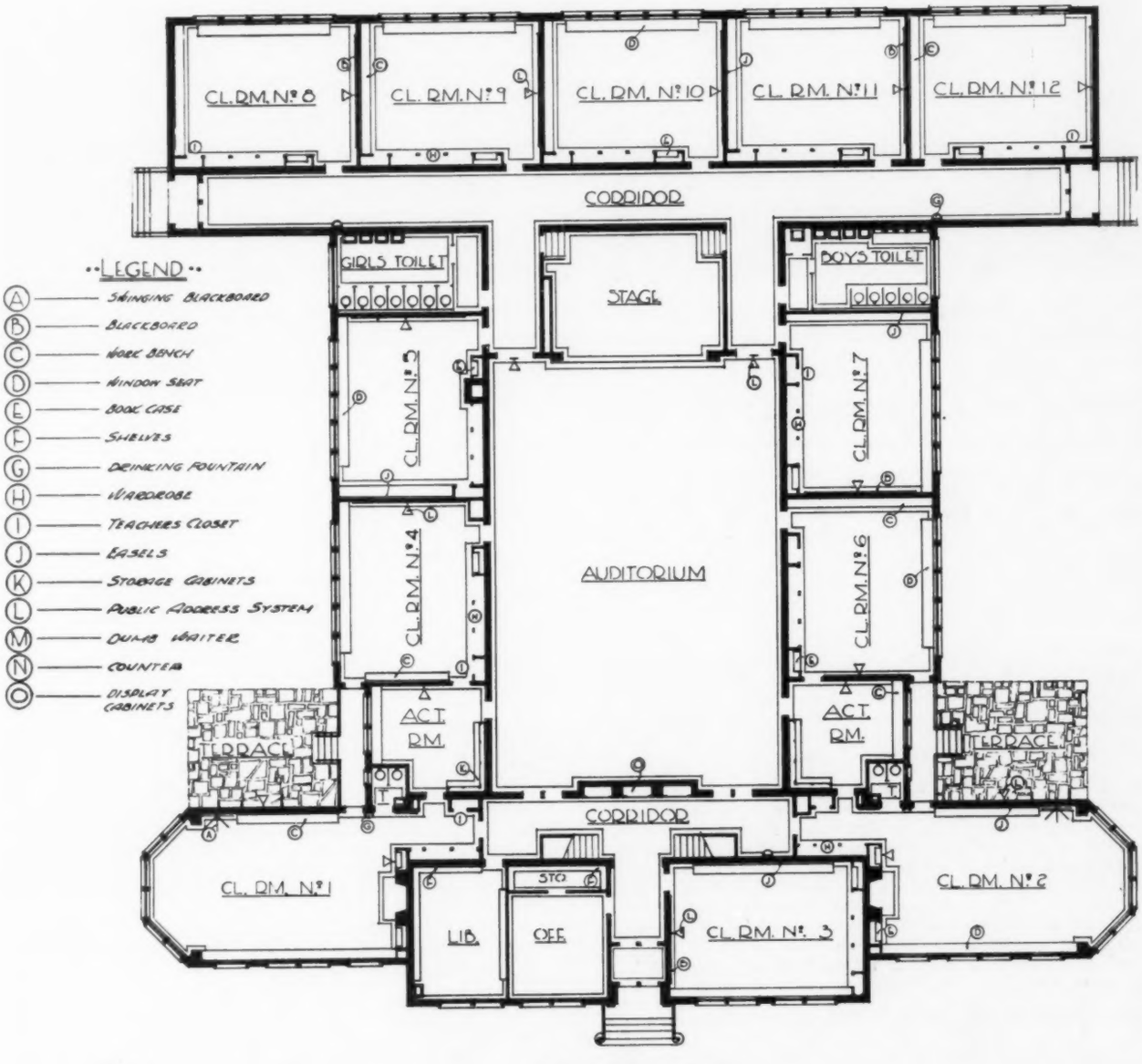
PUBLIC ADDRESS: Two band public address system with talk-back feature serves each classroom and paved terrace. Auditorium amplification is provided through the public address system.

GEORGE MASON ELEMENTARY SCHOOL, ALEXANDRIA, VA.

Superintendent: T. C. Williams **Architect: Division of School Buildings, Virginia State Department of Education**



··SECOND·FLOOR·PLAN··



··FIRST·FLOOR·PLAN··

Even a casual inspection of the Second Street Elementary School of Frankfort, Ky., is impressive because of the beauty of the exterior. This building has 16 classrooms and has been found adaptable to a flexible school program.

Outline of Construction Details

Superintendent: C. D. Redding
Architects: Leo L. Oberwarth and Sons

STRUCTURE: Foundations and basement, stone and concrete. Superstructure, solid brick walls. Exterior facing, selected common brick trimmed with Indiana limestone. Roof framing, combination steel and timber. Roofing, slate on three central units, twenty year bond built-up roofing on two wings.

WINDOWS: Special design of heavy wood frames. Band and music room windows, double glazed and set in felt. Exterior doors and windows, caulked and weather stripped.

FLOORS: Library, cork carpet. Kindergarten, linoleum with game patterns in various colors. Recreation room, strip maple. Classrooms, maple blocks in alternating pattern. Corridors, kitchen, cafeteria, stairs, toilets and passageways, terrazzo. Floor construction between first and second floors, soundproofed. Band and music rooms, diamond pattern maple blocks over sound-deadening quilt.

WALLS AND CEILINGS: Recreation room, exposed brick walls of glazed light cream brick for first 7 feet and common brick painted to ceiling; ceiling, medium value acoustical board. Band and music rooms, acoustical plaster walls, paneled acoustical board on ceilings. Library, heavy timber beam ceiling with acoustical panels; walls, gypsum plaster. Kitchen, cafeteria, corridors, locker rooms, passageways and stairs, light cream glazed brick wainscoting with remainder of walls and ceilings, gypsum. Kindergarten, cork board wainscoting continuously around room, with remainder of walls and oval shaped ceiling, gypsum plaster. Toilets, light cream glazed brick walls, gypsum ceilings.

HEATING AND VENTILATING: Boilers, cast iron with automatic stokers. Syncretized unit heaters using part direct fresh air and part recirculated air with four distributor fans in each unit. Dual thermostatic controls for each individual room. Direct radiation, thermostatically controlled, used only in cafeteria, corridors and toilets.

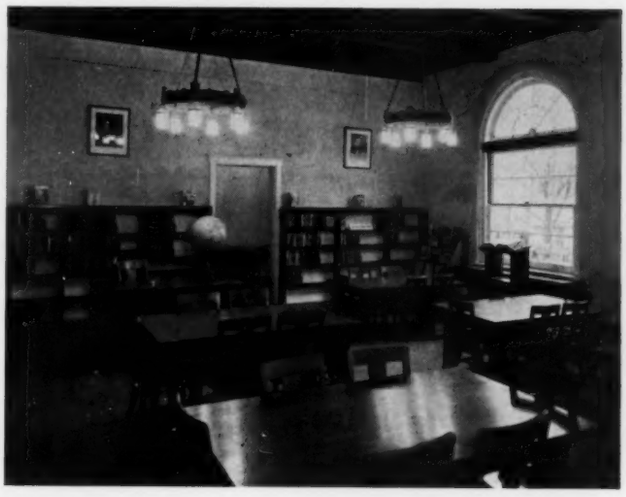
ELECTRICAL EQUIPMENT: Complete radio and public address system, with talk back feature from each room, control panel in principal's office and supplementary "mikes" in the band and music rooms for special programs and pupil training. Complete program clock system. Standard make fire alarms. Exhaust ventilators in all pupils' toilets and kitchen. Electrically operated refrigeration and kitchen equipment. Portable vacuum cleaner. Motion picture machines with sound equipment. Concealed indirect lighting in the entrance portico, flush lights in recreation room, indirect lighting in cafeteria, semi-indirect in rest of building. All wiring in rigid conduit with key switches. Service from street, underground. All service panels, no-fuse circuit breaker type.

GENERAL EQUIPMENT: Blackboards, natural slate. Bulletin boards, cork. Pupils' desks, movable type. Window shades, lightproof and adjustable with light prevention guards in all rooms to provide for instruction by motion picture. Auditorium seating, steel portable with carrying trucks. Cafeteria tables. Food preparation equipment, standard hotel types. Library equipment, all matched oak. Hardware, nonstaining solid white bronze throughout, with panic exits to outside doors and standard schoolhouse locks to inside doors. All doors, flush type. Built-in cove lighted cabinets in main entrance vestibule for display of trophies. Two bushel capacity gas fired incinerator with connection direct to cafeteria kitchen for burning garbage. Telescopic crane ash hoist for taking out ashes and taking in supplies. Lightning protection system at main boiler stack.

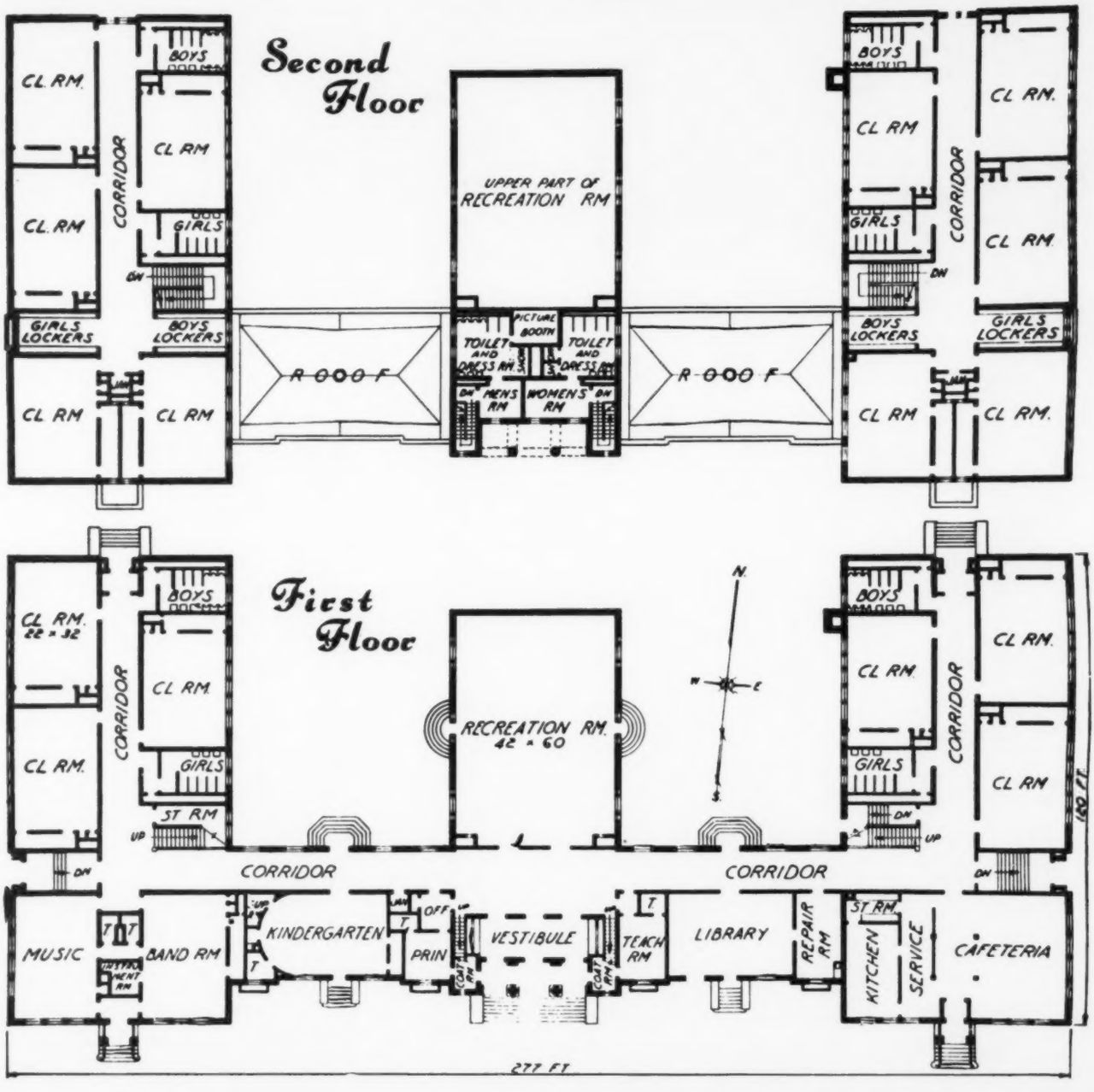
PLUMBING: All water pipe, copper and brass. Sewage lines, cast iron. Plumbing fixtures, enameled iron with chromium trim throughout. Outside drinking fountains in playgrounds. Pipe channels provided for principal plumbing lines wide enough to work in when necessary for repairs. All sewer lines enter one large cesspool before being carried off to the main sewer to provide for cleaning and repairing.

SECOND STREET ELEMENTARY SCHOOL, FRANKFORT, KY.

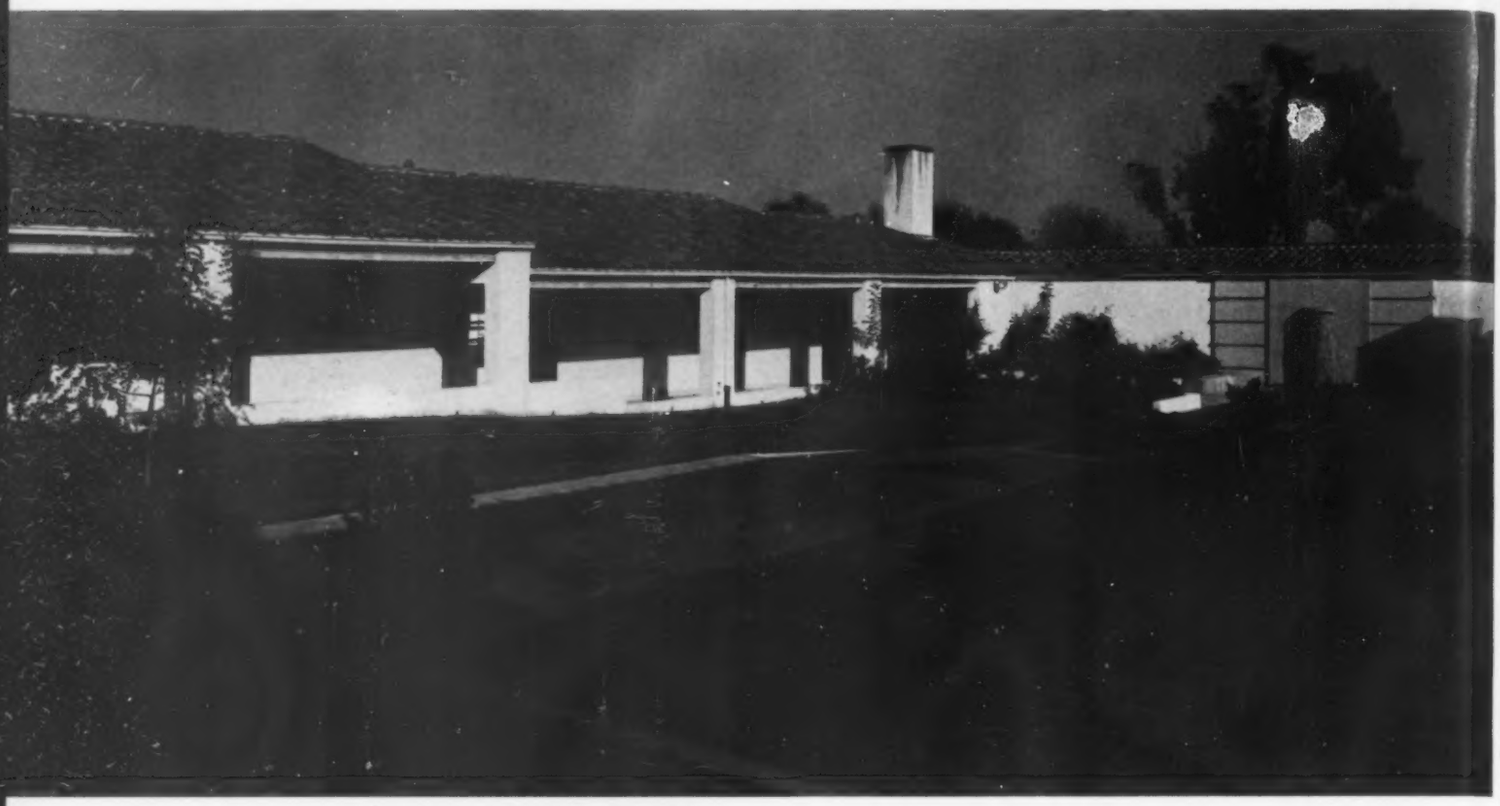
Kindergarten

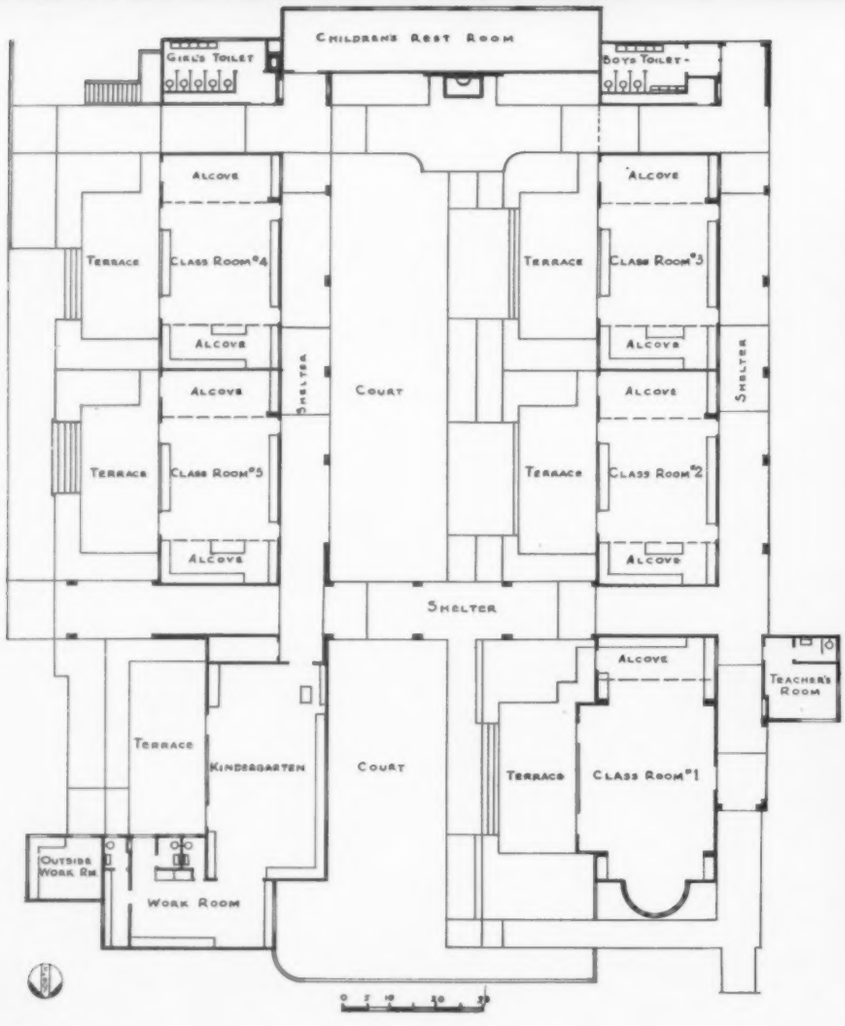


Library



SIERRA NEVADA REGION





Above: The two wings and the wall in front form an enclosed patio which has been landscaped into a thing of beauty. Left: In the floor plan note that each classroom has three parts: front alcove, rear alcove and general activity section.

W. L. VALENTINE PRIMARY SCHOOL, SAN MARINO, CALIF.

Superintendent: E. C. Neher

Architects: Marsh, Smith and Powell

Construction Details

STRUCTURE: Foundations, basement and floor slab throughout, reenforced concrete. Walls, wood stud sheathed. Partitions, wood stud. Roof structure, wood sheathed solid.

ROOF: Clay tile on composition under roof.

WINDOWS: Steel sash, projected type.

FLOORS: Asphalt tile in all room spaces. Terraces, quarry tile. Toilets, ceramic tile.

WALLS: Hard wall plaster on metal lath, painted. Toilets, glazed tile wainscot up to 5½ feet.

CEILINGS: Acoustical plaster on metal lath.

MILLWORK AND DOORS: Complete job of case and cabinet work. Reversible blackboards. Slab doors. Rolling tool truck in each room.

HEATING AND VENTILATING: Hot water circulating system with central heater and boiler. Two ventilating units in each classroom, thermostatically controlled. Entire system automatic.

PLUMBING: Every room equipped with sink, gas plate. Toilets, firehose stations, drinking fountains and hose bibbs connected to services.

LIGHTING AND ELECTRICAL INSTALLATIONS: Each room wired with inside circuits connected to photo-electric cells for dark day controls. Entire lighting system, indirect (metal fixtures). Wired for sound system. Exterior patio floodlighted.

PAINTING: Thoroughly studied color scheme including 20 colors was used.

This primary school has been renamed the W. L. Valentine Primary School, a part of the Henry E. Huntington School. Note alphabet characters set into railing of the exterior approach in the picture above. Each classroom is 45 feet in length and opens onto an outdoor activity terrace paved with quarry tile and used for painting, construction and all sorts of noisy work. Each classroom has east lighting. Below: The work alcove of one classroom is in a nautical theme. Lower Left: A Huntington School classroom in which the general activities section and alcove are shown.

Wardner, Idaho, named after one of the original prospectors of that area, is a typical mountain mining town. Kellogg, at the mouth of Milo Creek, gets its name from the original discoverer of the galena deposits in that area. The twin cities line Milo Gulch between its source at the foot of 6000 foot Wardner peak and its confluence with the Coeur d'Alene River. School consolidation of these two mining communities began in 1912 with erection of a community high school.

The old building was erected in 1905 to house all grades and high school. Consolidation reduced it to a six grade school.

Above: Corridor, showing recessed, built-in lockers, maple floors and acoustical ceiling.

Left: The classroom for grades 5 and 6, like other classrooms in the building, is large, not less than 24 by 36 feet. Bulletin and display boards are as numerous as are blackboards and a specially designed display recess, which is a part of the built-in cupboards, is both utilitarian and attractive. All furniture is movable.

WARDNER SCHOOL, KELLOGG, IDAHO

Architect's sketch of the new six grade school that was opened this fall. Deep snow and difficult transportation in winter, together with a well-developed community activity program, made it desirable to plan the building as a community center as well as a school. A playroom was added to take care of indoor recreation. Savings from the use of materials salvaged from the old school probably amounted to $4000. These included sheathing, joists, studding, rafters and flooring. The dimension timbers having been cut when the West was young were of unbelievable quality and well preserved. Maple floors laid ten years ago were taken up without loss of a board and were relaid and sanded.

Superintendent: John M. Booth

Architects: Whitehouse and Price

Construction Details

STRUCTURE: Exterior walls, light faced brick with decorative striping at 6 foot intervals of dark faced brick.

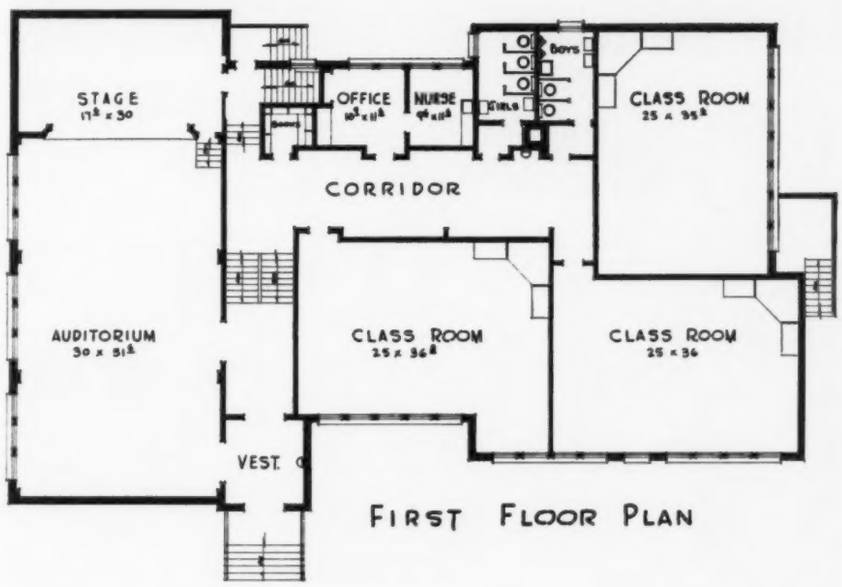
WALLS: Interior walls finished throughout in fir plywood, which has been given a rez-coating in light gray, finished with varnish. The result is a soft, light diffusing finish in which the grain of the plywood shows through to the surface. Auditorium also finished in plywood and has fluted pilasters along the side walls for ceiling beams. Lavatory walls, plaster, painted in two tones.

FLOORS: Maple, salvaged from the razed building, relaid and sanded. Linoleum floors in light blue clotted pattern with a 6 inch cove baseboard in lavatories; chrome head finish.

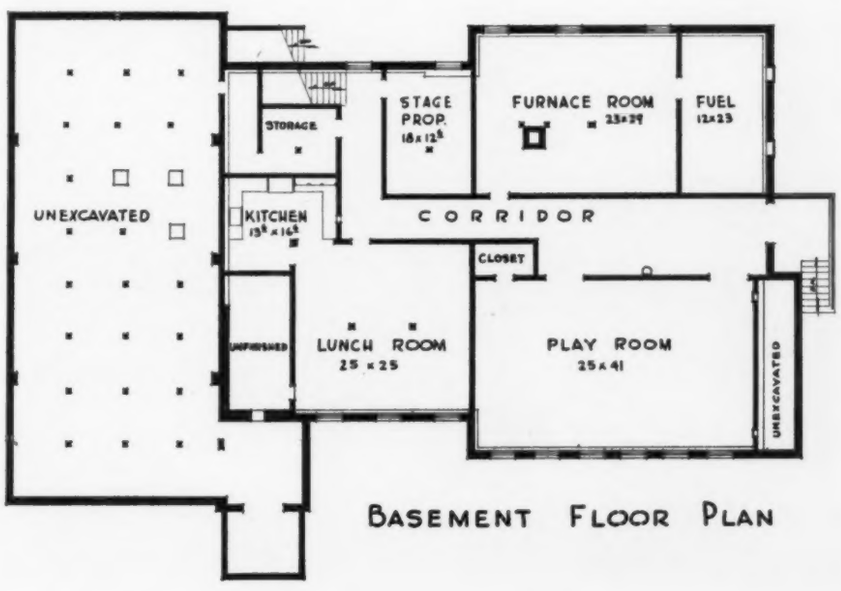
HEATING AND VENTILATING: Heating on the upper floor is by steam radiators, with louvers for fresh air beneath. Circulation is assured by means of a large, silent type of exhaust fan in the attic with grilles in the ceiling of the corridor. Classroom doors, of solid slab type, have ventilating louvers at the base. Kitchen, lunchroom and playroom are heated by unit heaters, with dampers to permit either entire use of outside air or recirculation of inside air or any combination of the two. Lavatories and kitchen have independent exhaust fans.

CLOTHING STORAGE: Lockers built into corridor walls.

EQUIPMENT: Modern movable furniture.



FIRST FLOOR PLAN



BASEMENT FLOOR PLAN

Superintendent: E. Allen Bateman

Architects: Karl C. Schaub and Son

The Woodruff school was planned for a modified activity program in which each teacher has charge of one group of children throughout the day. Each teacher is responsible for play periods for her group, there being no recess periods for the entire school. Each room was planned to be as self-operating as possible. Ventilated cloak cupboards open inside the room; each room is equipped with a small rectangular wash basin and drinking fountain. Top and center pictures depict activity in the kindergarten. Shown below, a room adjoining the stage has been equipped with kitchen facilities for the preparation of lunches that are served children who remain at school during the noon period in the auditorium-playroom.

Construction Details

STRUCTURE: Foundation and basement, reenforced concrete. Outside walls, 12 inch solid brick with caststone trim. Walls furred and plastered on inside. Structure over gymnasium-auditorium, steel construction.

ROOF: Trussed wood construction. Auditorium roof supported by steel beams. Roof slopes 1 per cent toward drains. Roofing, papco with 15 year guarantee.

WINDOWS: Gymnasium-auditorium, fixed block windows. Classrooms, standard double hung balanced windows.

FLOORS: Auditorium-gymnasium, maple. Classrooms, battleship linoleum. Toilet rooms, ceramic tile. Hallways, battleship linoleum over reenforced concrete.

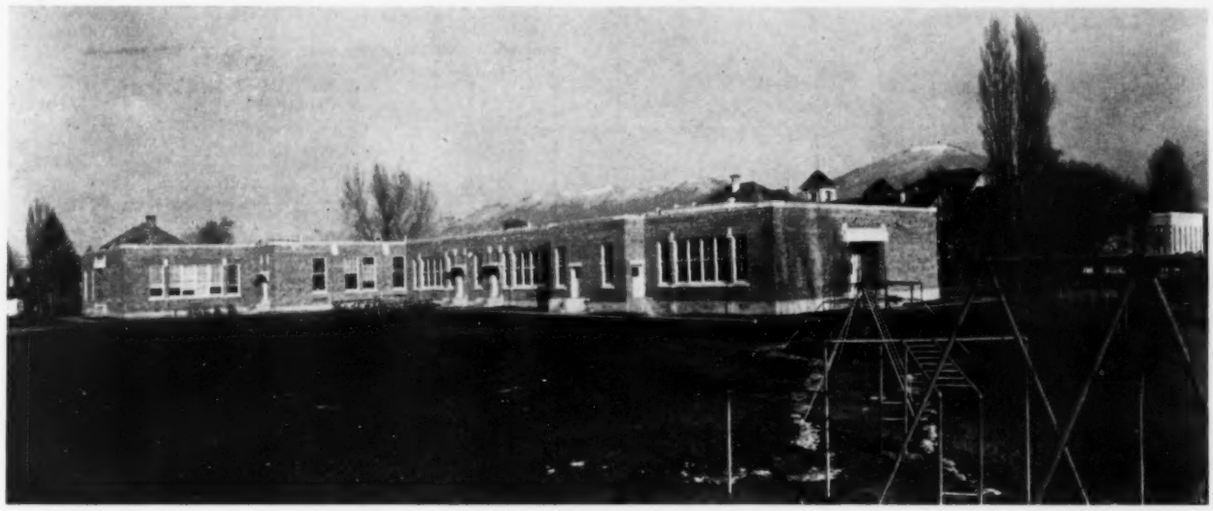
WALLS: Gymnasium-auditorium, salt glazed brick. Wainscot, 5 feet high and acoustical plaster above wainscot on walls and ceilings. Toilets, 5 foot ceramic tile wainscot, light brown in color. Hard wall plaster finish above wainscot painted to match tile wainscot.

EXITS: All rooms more than 30 feet from entrances, special exit doors. Exit doors from classrooms to hallways, recessed.

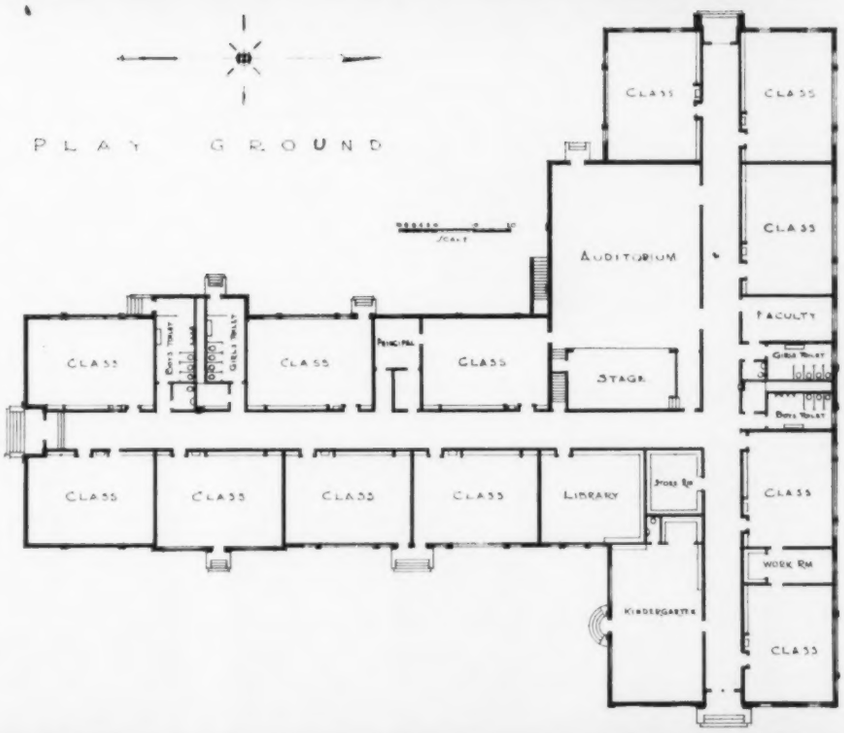
HEATING AND VENTILATING: All classrooms and auditorium, unit ventilators, some with direct radiation. Steam supply, from a central heating at the high school, approximately 300 feet from the machinery room below the stage. Toilet rooms, special ventilating equipment.

LIGHTING: Halls, ceiling lights, skylight and large stationary transoms over all classroom doors. Classrooms with north windows, photoelectric automatic light control combination.

WOODRUFF ELEMENTARY SCHOOL, LOGAN, UTAH



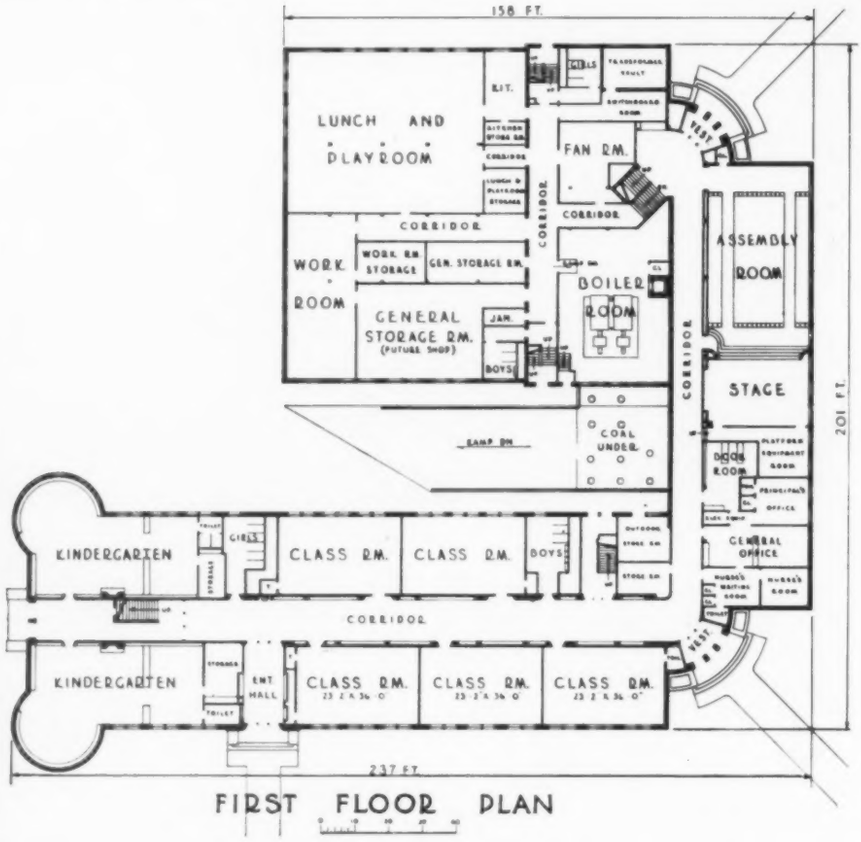
The Woodruff Elementary School was erected on a site adjoining the Logan High School campus and is heated from the high school plant. A dead end street that separates the high school and elementary buildings reduces traffic hazards to a minimum. At top is a view of the rear elevation showing high school buildings in the background and playground equipment and bicycle racks in the foreground. The structure is of one story brick construction and the building form is a modified "T" (see floor plan at right) and was planned for each classroom not adjoining a main entrance to have an outside door. Children enter and leave rooms before and after school, at noon and during play periods by the outside entrances. Note outside entrances. Below are photographs of a reading group in the library and of a folk dance in the gymnasium.



NORTH CENTRAL STATES REGION

Superintendent: Philip H. Falk

Architects: Law, Law and Potter



Above: Rear of classroom. Right: Front of classroom. Below: Kindergarten bay. Lower right: Art room cabinets.

MARQUETTE GRADE SCHOOL, MADISON, WIS.

Construction Details

STRUCTURE: Foundation and basement, concrete. Outside walls, brick and tile, stone trim. Floors, reenforced concrete joist and beams. Roof, steel joist insulation and gypsum. Gymnasium, structural steel, insulation (sound and heat) and gypsum. Roofing twenty year bonded pitch and gravel.

WINDOWS: Double-hung wood throughout, except glass blocks with ventilation units in gymnasium.

FLOORS: Classrooms, asphalt tile. Corridors, terrazzo border, asphalt tile field. Stairs, terrazzo throughout. Showers and locker rooms, terrazzo. Gymnasium, wood.

WALLS: Gymnasium, wainscot of cork, brick above. Corridors and stairs, wainscots of ceramic tile. Metal lockers along corridors.

CEILINGS: Acoustical treatment in all classroom corridors and gymnasium.

HEATING AND VENTILATING: Unit ventilators throughout with supplementary direct radiation. Complete ventilation system with heaters, motor driven filterers, complete temperature control, diffusion discharge grilles and zone control.

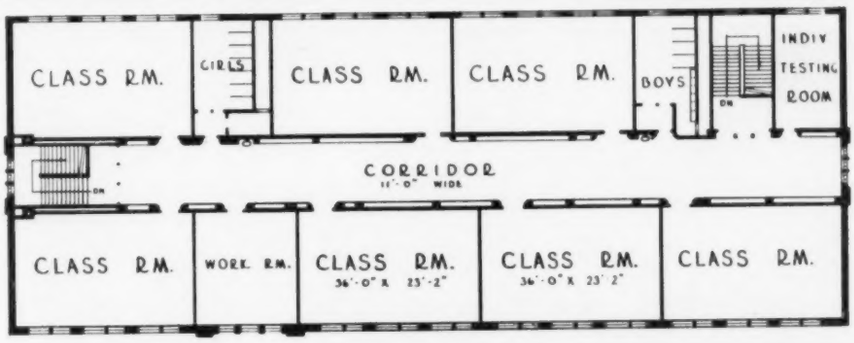
LIGHTING: Classrooms, semi-indirect luminaries. Corridors and secondary spaces, semi-direct fixtures. Gymnasiums, prismatic reflectors. Stage, complete lighting and switchboard with dimmers. All illumination conforms to accepted standards of intensity.

PLUMBING: Wall-hung concealed flush valve water closets, vitreous china lavatories and urinals. Gang type of showers with zone temperature control. All classrooms have sinks.

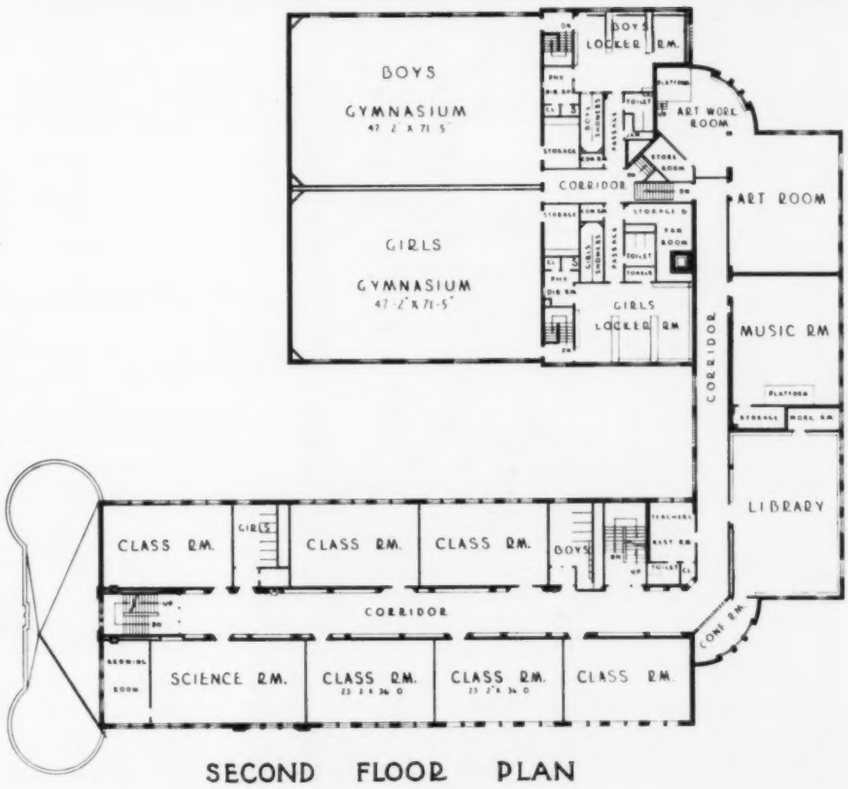
PROGRAM SYSTEM: Complete master and secondary clock and signal system with cross-connecting panel.

SOUND SYSTEM: Complete raceway for a centrally controlled sound system.

TELEPHONE SYSTEM: Complete dial type of automatic intercommunicating system with code call serving all parts of the building.

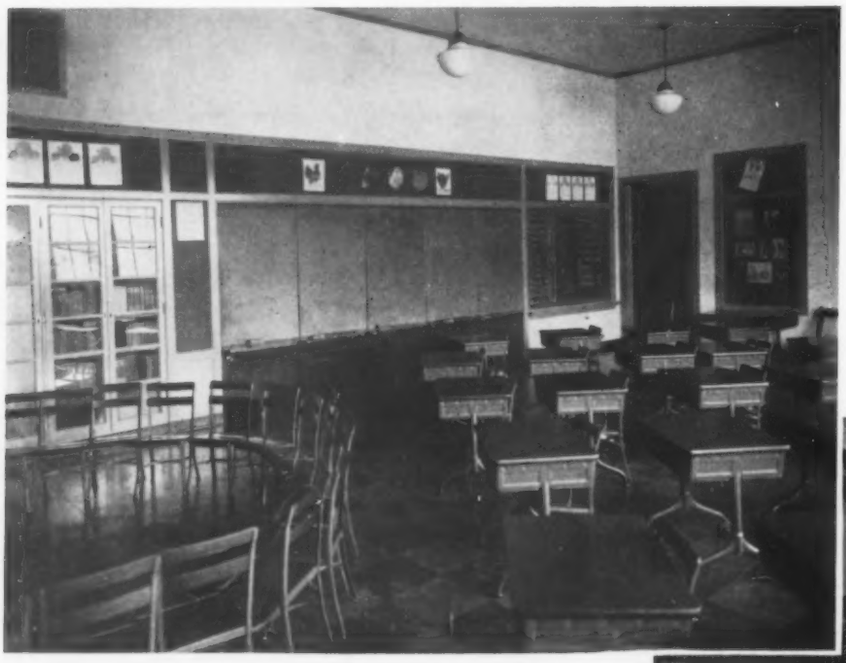


THIRD FLOOR PLAN



SECOND FLOOR PLAN

The Marquette Grade School was planned from the functional and instructional viewpoints. The classrooms are basically uniform in size and in functional features. They average 23 by 36 feet in dimensions and are equipped with movable desks. All sizes, shapes and types of teaching materials have been considered in providing storage space. Across the rear of each room is a work unit consisting of a wide bench with sink, running water and electrical outlets. Features of the art room, shown on opposite page, are cabinet space, display cases, puppet stage, metal lined case for clay, work tables and sink.



Superintendent: L. E. Ziegler

Architect: Arthur Kriehn

Below: The staircases at either end of the building, together with the corridor construction of terrazzo, tile and cream colored sand finished plaster, create an impressive atmosphere upon entering.

Each classroom is equipped with ample blackboard space, bulletin boards, ventilated wardrobes, book cases and a teacher's private wardrobe. These appointments, together with adequate artificial and natural lighting facilities and movable classroom equipment, make possible practically any type of arrangement for instructional purposes. Below: Through special planning the kindergarten may care for itself as a unit. It has an outside entrance, toilets and storage.

Outline of Construction Details

STRUCTURE: Foundation and basement, concrete. Superstructure, brick and load-bearing hollow tile walls. Outside walls waterproofed. All floors and stair construction are fireproof except spans carrying classrooms and roof, which are of wood construction.

ROOF: Roof is the dead level type with a twenty year bonded pitch and gravel roofing.

WINDOWS: Classroom window frames, heart wood cypress. Double-hung sash.

FLOORS: Corridors and toilets, terrazzo. Classrooms, asphalt tile. Gymnasium, hard maple.

WALLS: Walls except in classrooms wainscoted with light buff glazed tile. All walls, cream color, sand finish plaster.

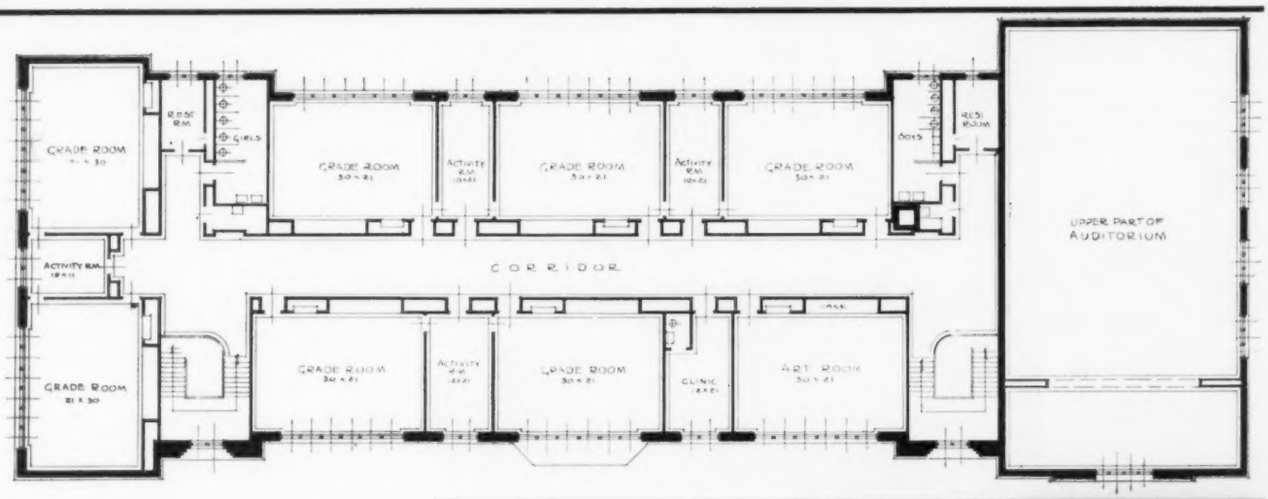
HEATING AND VENTILATING: Air conditioned throughout; playroom and auditorium has separate system.

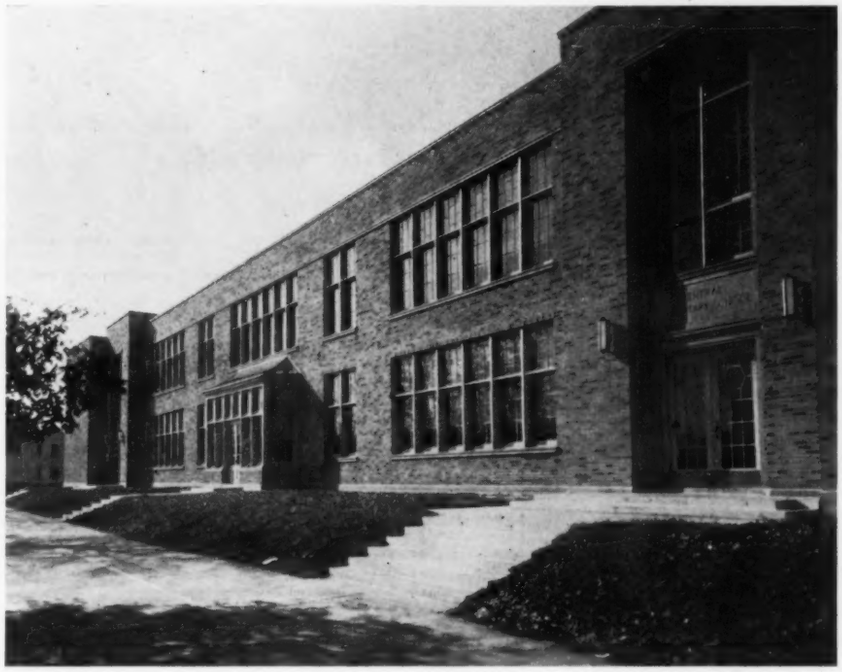
LIGHTING: All areas except playroom and auditorium lighted with standard closed units. Playroom and auditorium, special protected prism reflectors. Stage, border lights and disappearing footlights.

PLAYROOM AND AUDITORIUM: Ceiling treated acoustically. Stage equipped with cyclorama and velours front curtain.

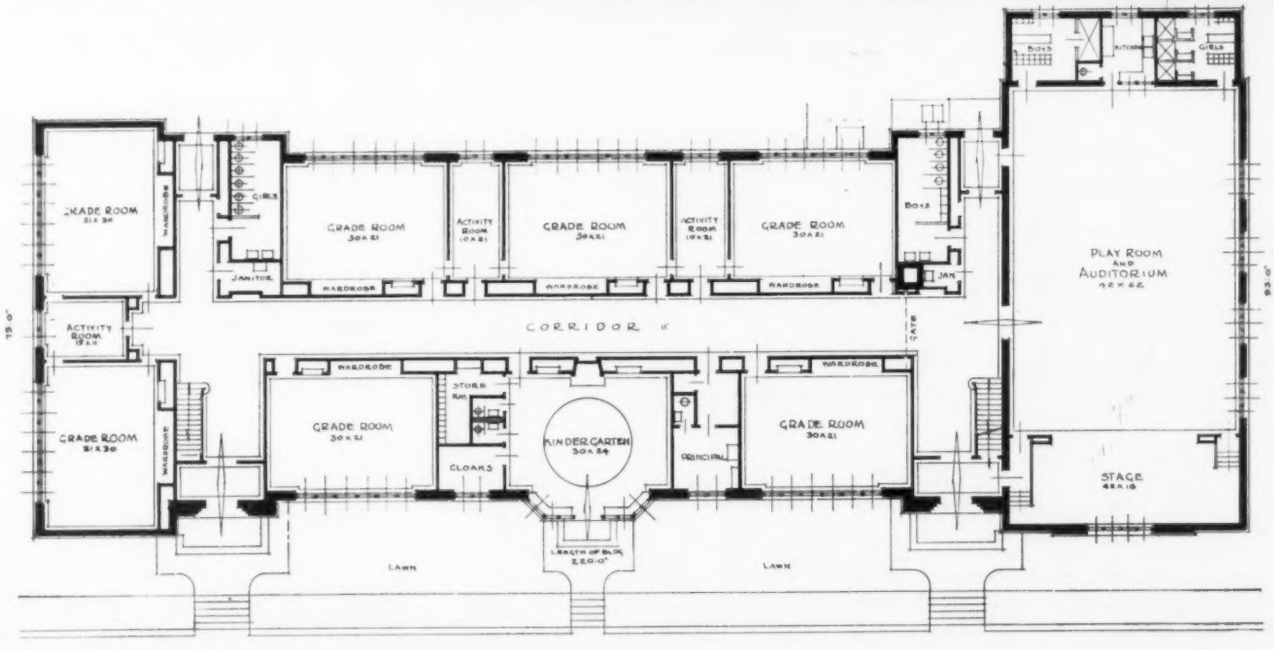
SOUND SYSTEM: All classrooms and auditorium are equipped with a complete public address, clock and program system.

CENTRAL ELEMENTARY SCHOOL, BOONVILLE, MO.



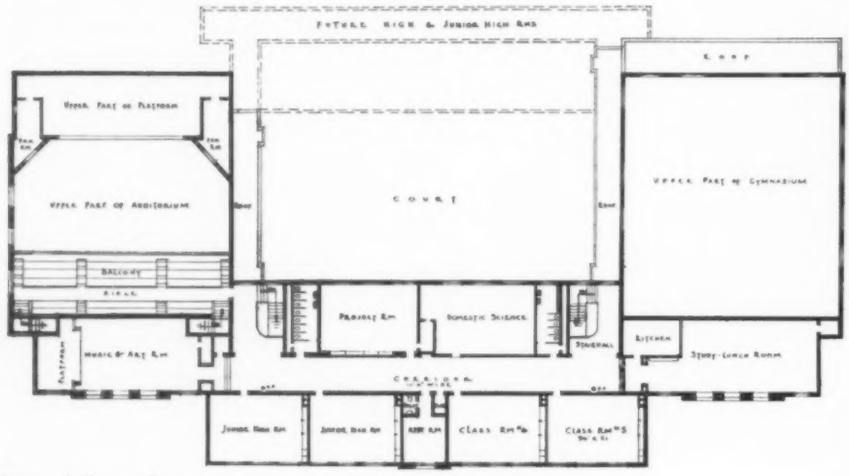


The Central Elementary School building has been in use for more than a year and its instructional advantages are becoming more outstanding each day. We are quoting Superintendent Ziegler and Principal Glenn E. Barnett. The building houses 475 children and there are four spacious entrances, two on each side of the building, in addition to a double door opening into the kindergarten at the center front. The doors on the west side provide access to the playground while the doors on the east provide access to the street. Placed conveniently adjoining each classroom is an activity room, which further enhances the instructional program by providing space for library work, handcrafts and other activities. Extra classroom activities are handled in the combined playroom-auditorium.

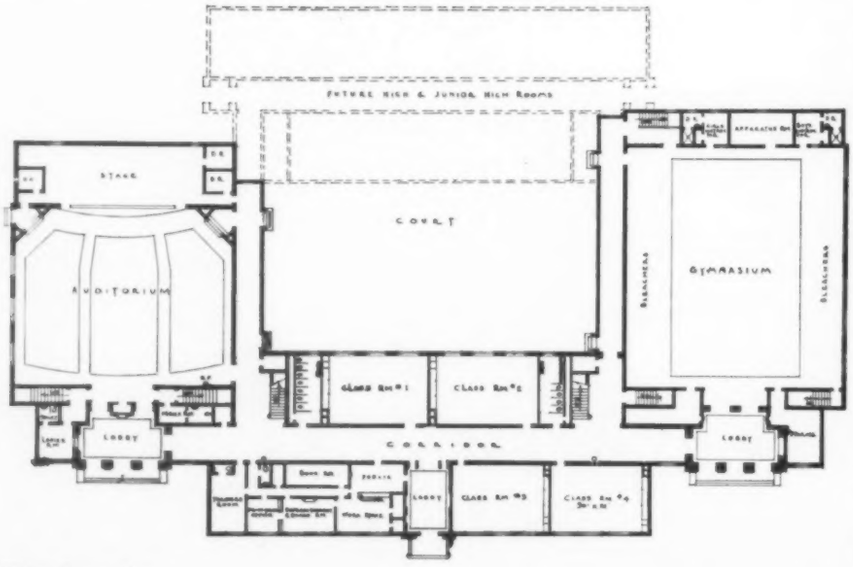


ELEMENTARY-JUNIOR HIGH SCHOOL, WORTHINGTON, OHIO

Front elevation showing the auditorium wing and entrance to the left.



Second floor plan



First floor plan

Superintendent: H. C. McCord

Architects: Thomas D. McLaughlin and Associates

The new Elementary-Junior High School of Worthington, Ohio, replaces two old structures which were built in 1873 and 1895. Total cost for building and equipment was about $195,000. Design is Colonial, which is in keeping with this historic village. There are three entrances, for the auditorium, the classrooms and the gymnasium. These units may be operated independently of one another. There are 12 classrooms, six of which are used for elementary grades. Cafeteria and study hall are combined. A kitchen having up-to-date equipment adjoins. When the windows opening from the kitchen into the study hall are raised the room is converted into a cafeteria. Shelves in one end serve for reference books. The office suite consists of the waiting room, general office, private offices for principal and superintendent, health clinic, storage room for books and supplies. The instrument panel for the public address system is in the superintendent's office. The clock and bell system is located in the general office. Both auditorium and gymnasium are used for community activities. The former seats 800 and the latter accommodates 600, including temporary seats.

Construction Data

STRUCTURE: Concrete foundations and basement. Solid brick exterior walls. Bar joist floor construction.

ROOF: Variegated color slate, pitched roof on main portions of building. Other roof, built up, tar and slag, bonded roofing, on concrete deck.

WINDOWS: Architectural projected.

FLOORS: Maple flooring in gymnasium and on platforms. Terrazzo floors in corridors, toilets, lobbies, entry and stairhalls. Other floors, asphalt tile.

WALLS: Salt glazed brick wainscot in toilets, corridors, gymnasium and stairhalls. Textured plaster in offices, entry and lobbies. Other walls and ceilings, Jackson sand plaster (except acoustical ceiling in auditorium).

HEATING AND VENTILATING: Two pipe modulating system. Direct radiation in corridors, offices and locker rooms. Unit ventilators in all classrooms. Thermostatic control.

ACOUSTICAL TREATMENT: Acoustical board ceiling in auditorium and under balcony.

CLOTHING STORAGE: Built-in wardrobes in each classroom.

EQUIPMENT: Most modern equipment throughout building.

COST: 28 cents per cubic foot.

How Baltimore Handles Pupil Promotions

JOHN L. STENQUIST
Director of Research
Baltimore Board of Education

THE implications of the facts of individual differences affect in some degree every angle of a public school system, its organization, administration and program of instruction. The facts of individual difference imply that it is not sufficient to be concerned merely with mass movements of pupils but that it is necessary to strive to provide the best possible school for each individual pupil.

Each pupil's progress through the schools is to him of utmost importance and, until the school system provides for him a program that adequately meets his needs, the school cannot be said to be doing its job fully. The acceptance of this thesis has brought about a continuous study in Baltimore of the individual differences of pupils, with consequent changes in the promotional practices of the public school system.

It has been the policy of the present administration of the Baltimore schools to move steadily toward greater flexibility in organization and in promotions. A systematic testing and supervisory program has been carried on continuously for many years, providing cumulative data for every pupil. Stress is laid on the study of the needs of each pupil by every member of the staff who comes in contact with him.

To meet these needs, an increasing array of types of schools and types of classes has been organized. Thus, there has been developed what are called "occupational" schools or classes for over-age and backward intermediate pupils who formerly failed and were eliminated; a division of special education for the mentally and physically handicapped, including primary and intermediate opportunity classes, and special shop centers for this type of pupil. There have been developed also general vocational schools of a lower grade than the regular vocational schools and various other new projects, all in addition to the established regular grade schools. In all the regular grades, moreover, continuous classification according to ability has been the rule for many years.

INSTRUCTIONAL STANDARDS FOR GROUPS OF DIFFERENT ABILITY

1ST YEAR OF SCHOOL	2ND YEAR OF SCHOOL	3RD YEAR OF SCHOOL	4TH YEAR OF SCHOOL

SLOW SECTION

1C	1B	1A	2C	2B	2A	3B	3A
Pre-Primer	Easy Primer	Easy First Reader	Average First Reader	Easy Second Reader	Average Second Reader	Easy Third Reader	Average Third Reader

The above standards are to be used only for children moving on the eight term plan and started as 1C's.

AVERAGE SECTION

1B	1A	2B	2A	3B	3A
Average Primer	Average First Reader	Easy Second Reader	Average Second Reader	Easy Third Reader	Average Third Reader

The above standards are to be used for average children moving on the six term plan.

SUPERIOR SECTION

1B	1A	2B	2A	3B-3A
Average Primer	Average First Reader Difficult First Reader	Average Second Reader Difficult Second Reader	Easy Third Reader Average Third Reader	Average Third Reader Difficult Third Reader

The above standards are to be used for superior children moving on the five term plan. These divisions are made by grades and not by semesters. The superior children are promoted when, in the opinion of the teacher and principal, they are ready for the next grade.

Figure 1

The successful operation of a widely differentiated organization is dependent in a large degree on an effective promotional plan, for any organization can be effective only insofar as it is skillfully administered.

Adjustment to individual differences in Baltimore begins with the first grade in which the organization plan shown in figure 1 has been in effect for a number of years. It will be noted that this is a scheme providing for slowly moving as well as for rapidly moving and average pupils. It provides flexibility in two directions: through variation in content and through a limited variation in time. In addition, there is also

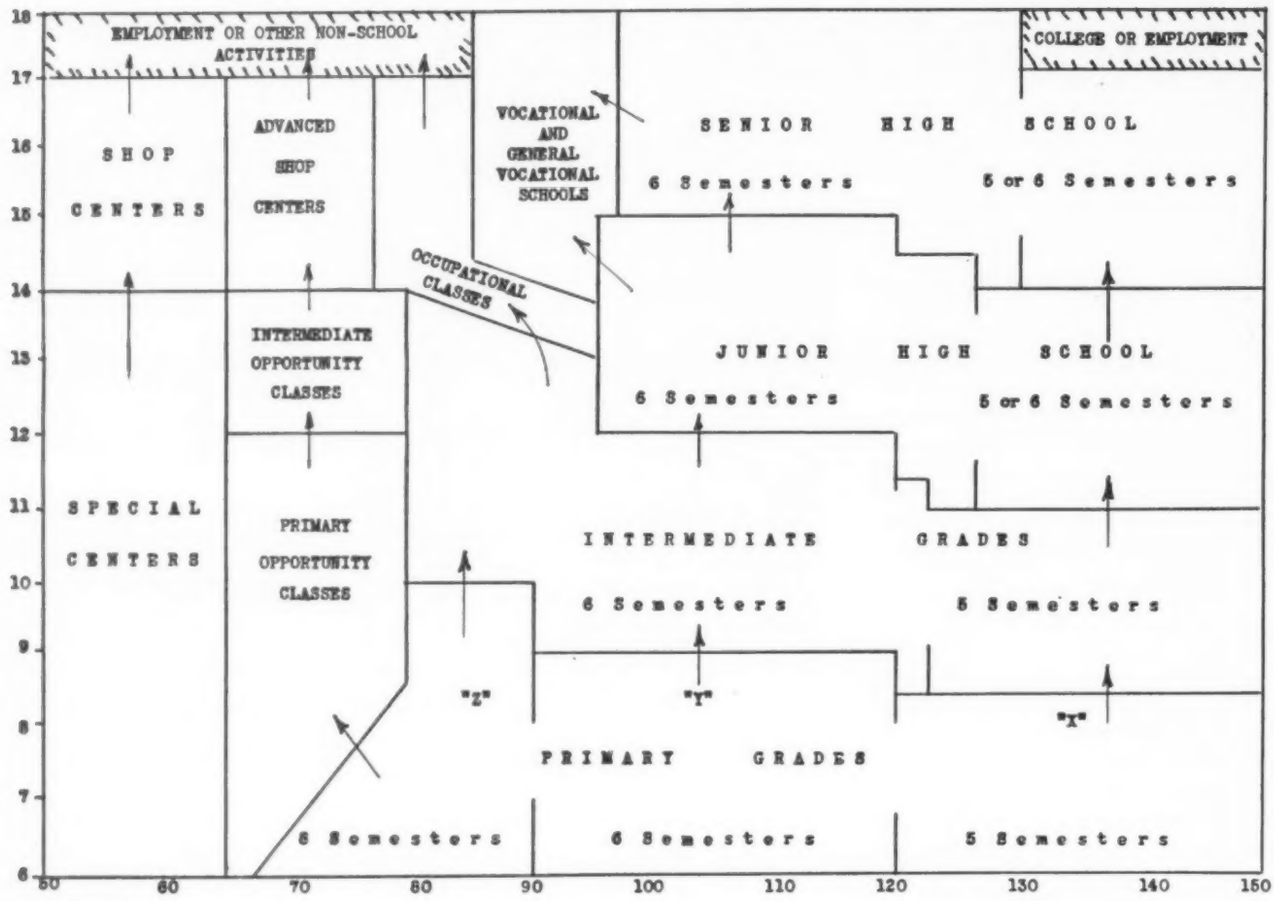


Figure 2

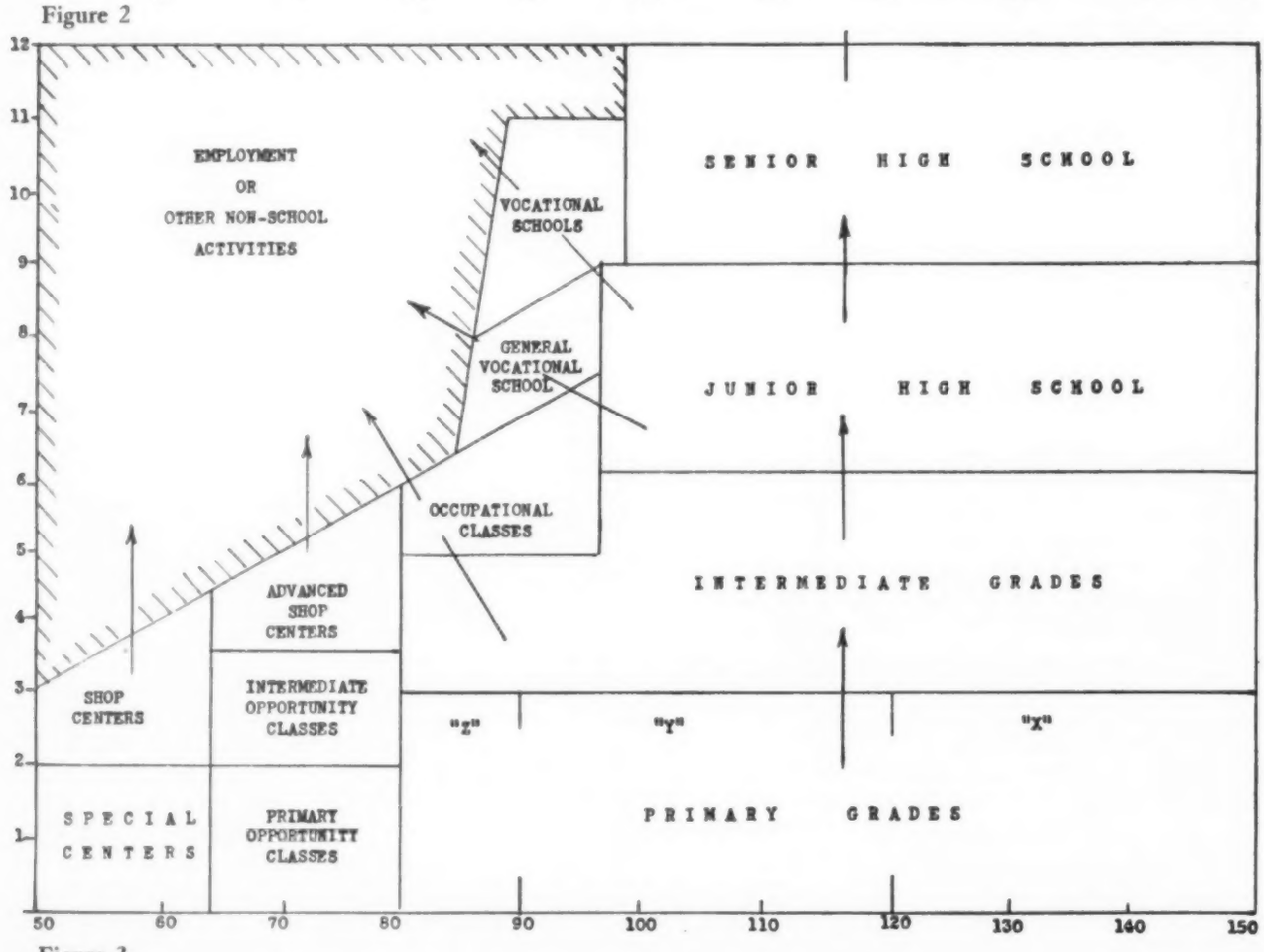


Figure 3

variation in methods. Thus, a primary pupil may become accelerated for as much as one semester but not more. Through the C classes provision is made for the slow pupil to spend an entire extra year in the primary grades without being classified as retarded. In some cases even C class pupils may repeat grades if this seems to be for the best interests of the pupil. But it is a markedly different procedure than the old method whereby slow pupils were merely converted into chronic repeaters. Under this plan a pupil is promoted whenever the work of his grade is completed. While, for a majority, this occurs at the end of the term, it need not occur then.

All this has the effect of providing greater flexibility in promotion standards and has resulted in what is believed to be important improvement in fitting the school to the child.

After the pupil has finished the primary grades, his promotion problems become more vital. What is required is an increasing variety of pathways through which the school system may hope to provide for each pupil a type and an amount of training that give promise of being best for him.

Promotion practices in Baltimore may be better understood in the light of the accompanying diagrams.

Figure 2 on the opposite page shows chronological age organization according to pupils' ability. The significant item to be noted is the attempt to provide a number of pathways through the grades.

The same facts are shown in terms of approximate grade level organization in figure 3.

Here, too, the more unusual features illustrated are the various special pathways available. Thus, for example, the occupational classes are now located in all sections of the city and have a total enrollment of approximately 3000. Suitable curriculums with definite courses of study and a generous program of handwork have brought encouraging re-

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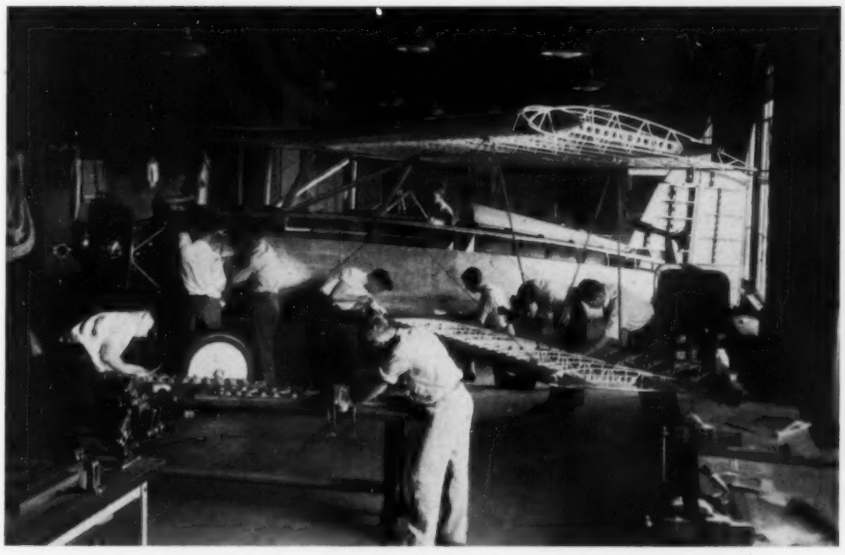

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1—Office boys, messengers, shipping and file clerks and duplicating machine operators in the making in junior commercial service courses in advanced occupational classes. 2—Senior vocational schools produce skilled mechanics. 3—General vocational schools train for semiskilled occupations in industry.

Welding is a skilled trade taught to pupils having a genuine test - determined mechanical ability.

sults with a group of pupils that formerly were failures in regular grades. Already there have been organized "advanced" occupational classes to make promotion possible. Similarly, general vocational schools are provided for pupils who have some mechanical ability but who are not eligible for the regular vocational schools. Some of these pupils may progress to the vocational schools but for most this is terminal education. Therefore, the course is made as vocational as possible. Pupils are taught how to do well unskilled or semiskilled jobs.

So, too, in the division of special education, it will be noted that there are several varieties of adjustments: special centers for the extremely slow children who typically do not learn to read until they are 10, 11 or 12. Primary opportunity classes are for slow children who typically do not learn to read until age 8 or 9. Intermediate opportunity classes provide a promotion for these. Shop centers are for low I.Q. pupils of age 14 or 15.

"The Baltimore policy," according to Asst. Supt. Willis,[1] "may be understood better by a description of four factors that affect the successful operation of a system of promotions based upon properly arranged grade standards.

"The first factor is the system of pupil classification that is employed. If pupils are grouped without regard for their educational characteristics, the abilities and needs of each class will range more widely than would be the case if the classification of pupils is made on the basis of ability and achievement. A careful selection of pupils will affect the promotion rate favorably by allowing greater opportunity for the teacher to meet individual needs and by enabling the pupil to compete successfully with his classmates. Consequently, the grouping of pupils according to their apparent needs and abilities is encouraged.

"A second factor that influences promotional practices is the type of curriculum that is provided for each pupil. Differentiation in the content, methods and activities within a curriculum and between curriculums is essential to a proper regard for each pupil's educational needs. Homogeneous grouping does not justify inflexible curriculums. Within each curriculum there will be a constant need for a variety of methods, for a distinction between minimum and maximum content and for a choice of activities. The benefits to the pupil of curriculum choice will be attained to the degree that there is a careful regard for the selection of content, method and activity within each curriculum and class.

"The quality of instruction is a third factor. Poor instruction may interfere with the proper use of the promotional machinery. Even with efficient work on the part of teachers and principal, instructional deficiencies may arise from the absence of the regular teacher or from changes in teachers' assignments or from other such causes. Therefore, it is important that the application of standards of promotion be made only after it is known that there has been no serious fault in the quality of instruction that the pupils have received.

"A fourth influence upon promotional practices is the educational characteristics of each pupil. Unless pupils are to be subordinated in the teacher's consideration to curriculums and courses of study, one should bear in mind the fact that, even after careful use of homogeneous grouping, the appropriate differentiation of curriculum materials and the provision of efficient instruction, there will still be noticeable differences in the abilities and achievement of pupils within any class. So true is this fact that it should be emphasized that the success or failure of a pupil cannot be determined by his achievement in one or two subjects alone. The measure of the suitability of a curriculum for a particular child, even under the most favorable conditions, is shown by his success in all of the various subjects within the curriculum.

"Since the function of promotion in a school system is to provide a consecutive order of wholesome educational experiences and training activities for each school child, it may be said that school practices in promoting and failing pupils are proper when the following conditions have been fulfilled:

"1. The number of nonpromotions has been reduced to a low proportion by: (a) the availability of curriculums suited to the needs and abilities of the pupils; (b) the careful diagnosis of pupil difficulties and errors, and (c) the consistent use of remedial instruction.

"2. The promotion data for each pupil are based upon accurate information and are supported by adequate records.

"3. The prospective promotion and failure of pupils are determined and reported to the parents well in advance of the end of the semester.

"4. The classification of pupils and their educational guidance are based upon the rate of their progress and upon their interests and attitudes rather than upon the number of promotions or failures alone.

"When these stipulations are met adequately by the school system each child receives the stimulus to attain his best achievement, avoids the sense of bewilderment or resentment that is born of continued failure or of unwarranted promotion and acquires a perspective of life that is in accord with his own abilities and opportunities. In this fashion school promotions guide and direct each child into the educational program that can offer him the training that is peculiarly fitted to his needs."

[1]Willis, Charles F.: The Use of Promotions in a City School System, Baltimore Bulletin of Education **17**:3 (Jan.-Feb.) 1940.

Safety Begins in the Grades

WILLIAM E. HAYES
Principal, Intermediate School, Raritan, N. J.

PLAY activity, specifically that of of the noon-time program, is an avenue filled with multitudinous educational possibilities. Unfortunately, however, it is sometimes a means whereby injuries remove some of the participants from taking part in school activities, sometimes for a period as long as an entire year. During 1938 more than 3000 children were involved in playground accidents in schools throughout the United States—many of them of a serious nature. In the same year total public school accidents, including those in the building, on the grounds and traveling to and from school, numbered more than 16,000. Days attendance lost as a result of accidents totaled more than 52,000.

New to Elementary Schools

Safety education in elementary schools is a comparatively recent innovation. Widespread acceptance of it as a part of the curriculum took place less than a decade ago and, even today, the program ranges widely in emphasis from school to school. In many situations little attention is devoted to it; while in others, a well-rounded functional program is an essential part of the curriculum. The safety activities in such schools include safety patrols, bicycle clubs, first aid courses, carefully supervised playground programs and other allied activities. Where programs of this nature have been undertaken, playground and general school accidents have been reduced significantly.

It is perhaps unfair to paint a general picture of the total accident situation and attempt to apply it to an isolated school. Obviously, this is overemphasizing the problem. However, let us consider an average eight room elementary school of 250 pupils. Data I have compiled during a three year period have revealed that at least one reported accident occurs on the play area and in the building weekly. It is reasonably safe to assume that an equal number goes unreported. This gives an estimated total of more than 80 accidents, minor and otherwise, that occur during the school term.

A program to eliminate this great number of casualties would vary greatly within individual schools. Size of the school, location, facilities and available supervision would all affect the type of program. However, several general safety suggestions may readily apply to a majority of situations.

The educational division of the National Safety Council indicates three suggestions that relate to the development of safety habits and attitudes: (1) teaching safety in actual situations; (2) safety as a definite part of the course of study, and (3) organizing extracurricular activities that directly relate to safety.

A number of functional methods of augmenting the average school safety program are listed herewith. Most of these have been worked out in schools ranging in size from 40 pupils to more than 600. A combination of them will result in a well-balanced safety program. In establishing a program of safety education, any or all of these could be utilized as a foundation program.

Seven Steps to Consider

1. School Safety Patrol: Groups of boys and girls are responsible for the supervision of halls and crosswalks. Part of their work consists of discussing safety with children in the lower grades, mimeographing special safety pictures for this group and carrying on a continuous safety program in school throughout the year.

2. Playground Squad: It is the job of a group of older pupils to assist the teachers on the playground in organizing and supervising group games. Members are responsible for a certain area of the playground, its equipment, condition and general appearance. Members also act as referees or assistants in the children's games.

3. Bicycle Club: Owners of bicycles are banded together for weekly meetings and discussions. Rules of safety, for pedestrian and rider, and road courtesy are considered. Weekly bicycle trips are taken in which opportunities to practice the rules are provided. Not the least significant part of the program is a semiannual assembly in which correct modes of bicycle conduct are illustrated by movies of the group and by actual riding on stage.

Supervise First Aid

4. First Aid Squad: A group of boys and girls, trained in first aid, circulates throughout the playground during activity periods and watches for minor cuts, bloody noses, scraped knees and other playground injuries. This group with Red Cross training is capable of rendering first aid for many injuries. Its main function, however, is not treatment but supervision. First aid care, when necessary, is given by the teacher in charge, who is usually a first aid instructor.

5. School Assemblies: Several times during the school year, local safety leaders are brought in to speak before the school. The police chief, fire chief, a representative of the insurance companies, the Red Cross secretary and the rescue squad captain are a few that are available in many communities. Subsequent discussion instills ideals of safety.

6. Curriculum: A planned curriculum program to include some safety education each year, suited to the needs of the children and their ability to comprehend, is essential in a well-rounded program. While this part of the program is not primarily activity learning, it gives each pupil a background of knowledge relating to all phases of safety.

7. Student Council: A civic group is responsible for the application of safety throughout the school. This group augments the work of the safety patrol and metes out punishment to offenders. It serves as a legislative group to set up safety objectives for the entire school.

The School System

IN VISITING Atlantic City for its 1941 convention, the A.A.S.A. avails itself again of the world's finest convention facilities. With unlimited exhibit space readily accessible, with meeting rooms accommodating any number from 100 to 5000 persons, with the main hall offering room for spectacular exhibitions surpassing Madison Square Garden itself, the Auditorium is any convention manager's dream.

Atlantic City is, of course, primarily a resort city. Spread along its famous Boardwalk for several miles are some of America's finest hotels. The convention comes at a time when these hotels can be given over to the superintendents. The Washington's birthday holiday attracts thousands to the resort but this is only a fraction of the mid-season throng the city entertains, so that housing is not taxed by the convention.

The Boardwalk, America's safest street, has been an interesting development. Originally built on the sand in 1870, it cost $5000, was 8 feet wide and was put away in time of storm. Every decade it has been redesigned and often relocated as the beach has widened. Since the turn of the century it has been similar to the present, a wide, 7 mile raised street, lined on one side by unusual shops and hotels. The piers, some reaching far into the ocean, are the only structures permitted on the ocean side. The Boardwalk has been built under easement deeds, but the city has gradually acquired title to the land on which it stands, although after seventy years this process is not complete. It is held under close restriction as to the type of building and the kind of sales permitted.

Behind the "front porch" is a thriving town of more than 60,000 people. Supt. Arthur S. Chenoweth, host to the convention, offers visiting superintendents the hospitality of the schools.

The senior high school serves Absecon Island, which includes residential Ventnor, Margate and Longport, as well as Brigantine, the island northeast of Atlantic City. It has 2800 pupils in its two million dollar building, built in 1922.

In this building there is a cosmopolitan representation from many racial sources. The chief commencement speaker at the last graduation, the equivalent of "valedictorian" in some schools, was a Negro. Several now famous Chinese have been graduated by this school. Many children of missionaries who are having their sabbatical year in Ventnor help to bring to the student body an atmosphere of foreign lands and distant cultures. Here is an unusual degree of democratic control. Freedom for pupil self-management in school life, in the mechanics of assembly, is not much abused.

The school's setup for musical training is extensive. Music theory, appreciation and voice are major subjects counted for diploma credit. In addition, there are choruses, glee clubs, orchestras and a fine band. Trios and individual artists are furnished for social and school affairs.

Adapted courses have been tried for several years. One course is offered to selected youths in which the pupil's own ability is the standard. Another more general course offers standard courses to those not intending to prepare for college, with the content of the courses modified to fit the immediate needs of the group. These courses are followed by a relatively small proportion of the student body, as a result of careful guidance in choice of curriculum.

A school administration building includes the office of H. H. Young, secretary of the board of education. Somewhat unusual is the system of handling pupil funds: "internal accounts." Mr. Young has developed a procedure which not only has assured the safe keeping of pupil funds but which has simplified the perplexing problem of pupil and teacher accounting. The system has met with wide commendation and has been adopted by many other cities as a distinct contribution to school financial bookkeeping.

Vocational education is directed by Frank R. Flower. There are schools for boys and schools for girls, featuring courses adapted to employment conditions in Atlantic City.

Twelve elementary schools are scattered throughout the city. The junior high school—so called—is a

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of the Convention City

FLOYD A. POTTER
Director of Elementary Schools
Atlantic City, N. J.

central school for seventh and eighth grades. Here the student body is organized into a school congress composed of room representatives. Under this organization is centered a variety of school tasks and committees, such as safety patrol, corridor corps, flag club, lunchroom aids, junior librarians, school magazine, orchestra, band and glee clubs. Specialized training in music, art, shop and home economics is elective, offering some opportunity for exploration. There are unusual provisions for nonacademic, over-age pupils, which provide wider opportunity courses for exploration.

Most elementary schools end with the sixth grade. Many interesting experiments are under way. Some of these have been well worked out and have become standard procedure. There are several well-established school magazines and newspapers.

A few Atlantic City schools have developed well-equipped libraries for reference, study and recreational reading purposes. Falling enrollments have permitted the equipping of special purpose rooms in most buildings. There are good dental clinics. Moving pictures are used for instructional purposes in nearly all classrooms.

Surplus commodities provide breakfast and lunch for undernourished children. A modified scheme of universal promotion based largely upon age and social maturity is gradually being adopted. This promises to correct the wide variation in age and grade placement. Reading levels are used to measure progress in reading as well as for the purpose of determining reading material for individual use and progress.

Course of study committees have for three years been revising the different elements of the curriculum. Manuscript writing is used in the first two grades, with the transition to cursive writing late in the second year. Some classes are making this change during February.

Superintendent Chenoweth has announced that principals of schools will welcome visitation and will be glad to arrange for visitors to see the procedures or situations in which they are interested. The School Administration Building is located at 1809 Pacific Avenue, which is half a block from the Hotel Claridge.

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Some typical scenes of curricular activities in the Atlantic City schools: 1—Using the library in the Brighton Avenue School. 2—The animals visit Richmond Avenue School. 3—Art pupils painting a mural of the city's sky line. 4—Fifth grade group sketching at a boat slip in the inlet. 5—There are good dental clinics in elementary schools, which are well staffed by a dentist and nurse.

How Junior Colleges Rank

EDWARD F. MASON

IN DOUBLING their enrollment in the last seven years, the junior colleges of the United States, now with 200,000 students, have been influenced by the educational policies and traditions of the several states, by geographical considerations, by problems of population and by factors of financial resource.

In some states the junior college has gained place as an important arm of the higher educational system. In others, public policy and tradition still cling to dependence upon the four year institution. Some states educate a much larger proportion of their youths, ages 18 to 21, than do others. Some states have higher concentrations of adult population with which to provide the education.

The extent to which the junior college has gained a place for itself in the respective states is revealed by a graph of junior college enrollments per 10,000 population, worked out by the American Association of Junior Colleges.[1]

This graph shows, as would be expected, that California leads. But Utah and Idaho come second and third, advancing from positions they would have far down the line if only total enrollments and number of institutions were considered. Kansas, Arizona, Mississippi, Oklahoma, Texas, Missouri and Georgia gain recognition for their well-known vigorous espousal of the junior college, and New Mexico and Montana are seen to be more definitely committed to the junior college method than would have been supposed.

A comparison of the first places in enrollment per 10,000 population with the number of junior colleges and with total junior college enrollment throws significant light on the status of the junior college movement in the leading states.

California ranks first in all these lists. California's junior colleges not only are numerous but are large. The average size of a junior college in California is 1151.

[1]Ratio of junior college enrollment (Junior College Directory 1940, American Association of Junior Colleges) to estimated population, 1937 (Census Bureau estimate).

No. of Jr. Colleges[2]		Jr. College Enrollment[2]	
Calif.	64	Calif.	73669
Tex.	40	Ill.	14711
Iowa	36	Tex.	12804
Okla.	29	Mo.	7831
Kan.	24	Ga.	5925
Mo.	24	Kan.	5398
Ill.	23	Okla.	5394
Pa.	23	Miss.	4645
Miss.	21	N. C.	4592
N. C.	21	Mich.	4186
Ga.	20	Mass.	3648

Forty-nine of California's 64 junior colleges are public institutions, administered under an organization that has been carefully planned in well-considered legislation. High entrance requirements for the state university leave only about one third of the state's high school graduates eligible for university enrollment. But all are eligible to attend the junior colleges, tuition free. Many of the district and public junior colleges have grown to unprecedented size, the largest having an enrollment of 8317.

There may be two sets of conditions under which a state will have a heavy junior college enrollment. On the one hand, it may emphasize the junior college to the neglect of other forms of higher education. On the other, its interest in the junior college may be one aspect of a thorough commitment to the value of four year college and university work.

As a measure of a state's total interest in higher education, one may take the number of its college students per thousand youths, ages 18 to 21, as computed by the United States Office of Education.[3] Or, since educational funds must come from the adults, an even more significant index is the ratio of college population to adult population.[4]

In both these respects California stands high. California is exceeded only by Utah in the proportion of its youths who go to college. California does have a large ratio of adults to youths but even with this advantage it stands fourth in its number of college students per thousand adults. California has more junior colleges than senior colleges but even in number of senior colleges it is exceeded only by New York, Pennsylvania, Illinois and Ohio.[5]

The discovery that Utah and Idaho rank next to California in junior college enrollment in proportion to population is a surprise. Neither in total junior college enrollment nor in number of junior colleges has either state been noteworthy. But both are sparsely populated and each has more than twice as many junior college students in proportion to population as Illinois and considerably more than twice the average for the United States. This may be taken fairly to mean that these two states depend heavily on the junior college.

College Enrollment per 1000 Youths[3]		College Enrollment per 1000 Adults[4]	
Utah	256	Utah	41
Calif.	225	Ariz.	27
N. Y.	189	N. Y.	25
Wash.	187	Calif.	24
Ore.	181	Wash.	22
Colo.	176	Colo.	22
Nev.	174	Mass.	22
Ariz.	170	Ida.	22
Mass.	170	Neb.	20
Kan.	167	Ore.	20
N. H.	159	Kan.	20
Ill.	158	Okla.	20

Utah especially lays great stress on higher education. Utah has more college students in proportion to its adult population than any other state in the country. The large Utah enrollment in higher education is particularly noteworthy because Utah's youth population is high in comparison to the number of adults by whom the educational system must be supported. Utah has six junior colleges, five state supported and one privately supported, and a proposal

[2]Junior College Directory 1940.

[3]U. S. Office of Education: Statistics of Higher Education, 1935-36, p. 25.

[4]Office of Education, *Op. Cit.* Pp. 23 and 25.

[5]Office of Education, *Op. Cit.* p. 5.

Among the Various States

Director of Publication, Commission on Junior College Terminal Education

for increasing the number of state institutions is under consideration. Average enrollment for the six is 334 students.

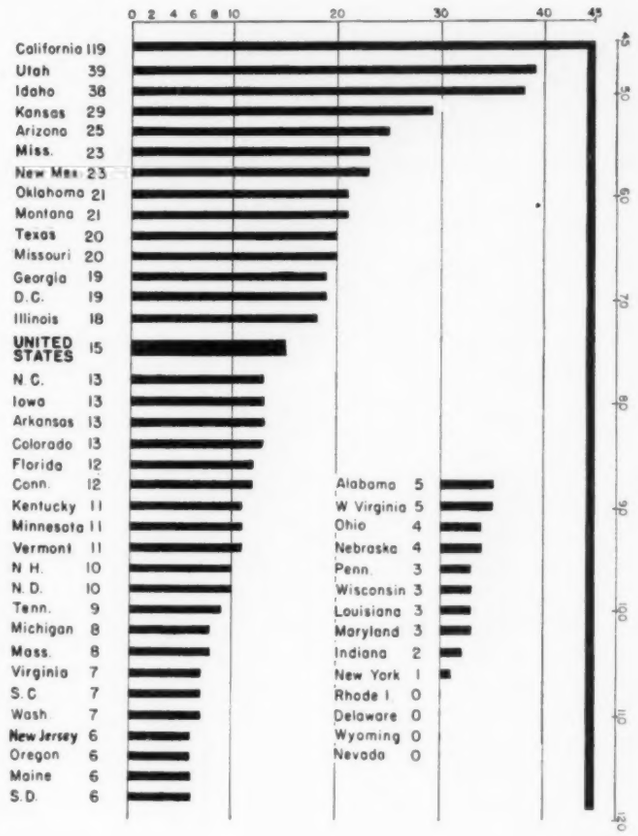
Idaho is also high in its proportion of students to adult population. It has four junior colleges, with an average enrollment of 469, one being the state-supported southern branch of the University of Idaho, which has 1200 students.

Kansas is strongly committed to the junior college policy, having more junior colleges than senior colleges and being among the first 10 states in its proportion of students to youth population. But Kansas junior colleges have an average enrollment of only 225, which is considerably below the average of 349 for the United States.

Arizona, in fifth place on the graph, is a sparsely settled state with only two junior colleges but with an interest in higher education that makes its student-adult ratio second only to that of Utah. Arizona's two junior colleges have an aggregate of 1036 students.

Mississippi and New Mexico are in a virtual tie for sixth place. The two states are notably diverse. Mississippi has 21 junior colleges but they are small, with average enrollment of only 232. New Mexico has only two junior colleges but their enrollments average 494. New Mexico has a lower proportion of adults than Mississippi but educates a larger proportion of its youth in higher institutions. Mississippi has a state system of public junior colleges definitely planned and organized to make them "people's colleges" to provide education at minimum expense.

Oklahoma and Montana rank within a fractional point of each other for eighth place but the figures for Montana are incomplete. Oklahoma, with its 29 junior colleges, is fourth in the nation in number of such institutions. Montana, on the other hand, has only four junior colleges. The 29 Oklahoma institutions, however, average only 193 students, whereas the three in Montana for which data are at hand average 384. Montana educates a larger proportion of its youth in colleges and universities than does Oklahoma but not as many in proportion to adult population.



The extent to which the junior college has gained a place for itself in the respective states is shown in this graph of junior college enrollments per 10,000 population, worked out by the Association of Junior Colleges.

Texas and Missouri are in a virtual tie for tenth place. Texas has more junior colleges than any other state except California, but it also has a larger population than California, with only a fifth as many junior college students. In total junior college enrollment Texas and Missouri are third and fourth, being exceeded only by California and Illinois.

Iowa has more junior colleges than any other state except California and Texas. But the case of Iowa is peculiar. Those 36 Iowa junior colleges average only 95 students each. This is the smallest state average in the country. The Iowa public junior colleges are organized by local school districts and are required to depend on student tuitions. The tuitions keep many students away, without providing large resources for the colleges, which might better be free.

Illinois is second among the states in total junior college enrollment. But Illinois is the third most populous state in the Union and its 14,711 junior college students do not bring the state to high rank in proportional enrollment. It is only a little above the national average. Illinois has 23 junior colleges, including some especially large ones in the Chicago area.

Of states at the bottom of the junior college chart, three are populous states that stress four year college and university education. New York and Pennsylvania are first and second in the nation in the number of their four year institutions and Ohio is fourth. New York is the only one of the three that ranks high in its ratio of college students to adult population.

Wisconsin, Louisiana, Maryland, Indiana, Rhode Island, Delaware and Wyoming are all low in junior colleges without rising above the median in total higher education provided by the adult population within the state.

Professional Ethics—A Code for

WARD G. REEDER

AS COMPARED with the other learned professions, the teaching profession has been tardy in developing a code of ethics and it has been particularly tardy, if not derelict, in publicizing and enforcing its code.

A large percentage of the teachers of the nation does not know that the National Education Association has a code of ethics and a still larger percentage is not acquainted with the provisions of the code. Many teachers are guilty of unethical practices because they do not know what constitutes ethical practice. Even more to be deplored is the fact that a few teachers knowingly engage in unethical practice in order that they may obtain some selfish advantage. In an investigation which I made a few years ago for the committee on ethics of the profession of the National Education Association, 327 different types of unethical practices were reported; 53 of these practices were mentioned by at least 10 of the approximately 1600 teachers reporting.

The 10 practices that were most frequently mentioned are listed in the table on the opposite page.

Unethical practices injure the prestige of persons who engage in them and, what is more to be deplored, harm the whole profession. They should be eliminated and they can only be eliminated through the dissemination of information on proper practice and through the creation of machinery that will make impotent the Judas Iscariots of the profession.

CRITICISMS INVITED

Although this code has gone through several revisions, its compiler regards it as tentative. Criticisms are requested. What sections should be omitted? What should be included or what items changed?

The Proposed Code of Ethics for

RELATIONS WITH PUPILS AND TO COMMUNITY AND STATE

1. The school exists to prepare its pupils for the best type of citizenship in a democracy and every school administrator should always strive to accomplish that purpose. He should use his influence in making educational opportunities within his department, school or school district as equal as possible and in meeting the needs of each pupil as fully as possible.

2. As an educational leader, he should strive to secure the cooperation of all forces for the improvement of the schools and should avoid alliances and other practices that tend to defeat the accomplishment of that particular purpose.

3. He should enforce all school laws and all local rules and regulations as long as they are in operation. He is under obligation, however, to support progressive proposals for changes in school organization, administration and other educational procedures.

4. He should take appropriate steps to keep the community continuously and truthfully informed about the schools. For him to misrepresent any condition, accomplishment or need of the schools in requesting school aid, in formulating a school budget, in making a school report or in any other school procedure is an unethical procedure.

5. He should be candid and fair to parents and pupils and should strive to keep within the school all information regarding parents' or pupils' deficiencies.

6. He should protect the school against any individual or group wishing to use its work or prestige for partisan politics, personal gain or selfish propaganda. He should not provide lists of the names and addresses of employes or pupils, except to reputable educational institutions or other agencies that have an unselfish interest in the welfare of the employes or pupils; nor should he grant permission to agents to interview pupils and employes on school premises, except on business directly related to the school or the welfare of the employes or pupils.

7. He should demand that all school funds be spent without graft or other waste. To this end he should insist upon proper accounting and auditing of all school funds whether they are public or whether they are extracurricular.

RELATIONS TO THE PROFESSION

1. In seeking to obtain a position or a promotion, the school administrator should use fair means. Some means which are unfair are the following:
   a. Applying for positions not known to be vacant.
   b. Underbidding a rival candidate or the salary schedule of the school system.
   c. Undermining a rival candidate.
   d. Misrepresenting his qualifications.
   e. Applying for another position for the sole purpose of forcing an increase in salary in his present position.
   f. Making promises to do something against the best interests of the pupils, the profession or the public.

2. The administrator should hold sacred his contract until he has fulfilled it or has been duly released from it.

3. He should seek the suggestions and cooperation of every employe in the administration and improvement of the school.

4. His relations with school officials and employes demand the same guarding of confidential information as is observed by ministers, physicians and members of other long-established professions.

Administrators

Professor of Education
Ohio State University

Those Who Direct Public Schools

5. Under normal conditions, he should transact school business with the official or employe next in rank. This means, for example, that the superintendent should normally not confer with a teacher regarding a matter which the teacher should discuss with her supervisor or principal; it means also that principals and supervisors should normally not confer with school board members on matters which they should discuss with the superintendent. When, however, the usual administrative channels do not function, any official or employe is permitted to confer with the next logical official or employe.

6. He should carefully consider all applications made to him for positions and should take feasible steps to notify each candidate of the status of his application. For him to recommend anyone for a position, except on basis of his having the best available qualifications for the position, is to be regarded as unethical.

7. He should reply to all requests for professional information regarding past and present employes. Such information should be candidly given but the employe should always be afforded the benefit of any doubt.

8. He should encourage the advancement of worthy employes by recommending their promotion, either in his own school or school system or in other schools or school systems. For him to fail to recommend a worthy employe for another position because he does not desire to lose his services is unethical. It is also unethical for him to refuse promotions and salary increases to deserving employes until offers from other employers have forced him to grant them.

9. He should not take personal credit for a school accomplishment made by another person.

10. As soon as a qualified substitute can be obtained, he should, upon the request of an employe, recommend him for release from his contract.

11. He should not act as an agent or accept any remuneration, gift or other favor for school books, supplies, equipment or any other school material or service in the selection or purchase of which he has a part; he should not accept any reward for helping a school employe to obtain a position or promotion. For him to solicit to sell to his pupils or employes anything involving a profit to him is unethical.

12. He should defend school officials and employes when they are unjustly attacked. On the other hand, he should not hesitate to recommend the disbarment of any whose conduct is a reproach to the profession.

13. He should give any adverse criticisms of an employe to him only in private.

14. Ample evidence, rather than unconfirmed rumor, should be the only basis for judgment concerning an employe or for action against him. He should avoid gossiping with anyone about a school official or employe.

15. Every employe should be given all reasonable encouragement and assistance that will enable him to give his best service; the new and inexperienced employe is especially entitled to such help.

16. Unless he has convincing evidence that a teacher has been unfair to a pupil, he should not interfere between the teacher and pupil in marking, discipline or similar matters.

17. He should take every reasonable step to help his successor.

18. He should maintain membership and activity in local, state and national educational organizations and he should take all other feasible steps to improve his efficiency and the welfare of the profession.

19. He should help to publicize this code among school administrators and to obtain its enforcement by them. (This means, of course, after the code or a revision of it has been adopted by school administrators' organizations.)

In any movement to improve the ethics of the profession school administrators must take the lead. In any such program of leadership school administrators have two obligations, namely, (1) to set the proper example in ethics for all teachers and (2) to take appropriate steps to make all teachers acquainted with the code of ethics of the profession and to obtain their cooperation in enforcing it. The latter aim may be accomplished by such means as discussing the code of ethics in at least one of the teachers' meetings during each year and by the appointment of local committees on ethics.

Although most codes of ethics for the teaching profession have kept in mind all members of the profession, it is natural that they should apply primarily to classroom teachers and should neglect school administrators. I am in agreement, therefore, with the recent recommendation of the committee on certification of superintendents of schools (a committee of the American Association of School Administrators) that a code of ethics for school administrators is needed to supplement the more general codes that have been formulated primarily for classroom teachers. During recent months I have sought the suggestions of teachers and school administrators on the content of a code of ethics for school administrators and have incorporated the suggestions into the accompanying tentative code.

Frequent Unethical Teaching Practices

	Times Mentioned
Gossiping about and criticizing other teachers	439
Slurring the profession	274
Breaking of contracts	207
Applying for positions not known to be vacant	205
Exaggerating qualifications and failing to give all pertinent facts in writing recommendations	175
Cultivating friendship among school officials and their families in an attempt to exercise a "pull"	165
Failure to be a progressive student of education	164
Failure to support school policies until they are changed	160
Underbidding for a position	150
Going over the head of an administrative superior	133

Chalk Dust

Education Has Enlisted

SO THEY thought we were a bunch of impractical visionaries, did they? They thought we were desiccated old dreamers who muttered of musty manuscripts and spoke in sesquipedalian words? They thought we were Ichabodian innocents? Oh, yeah.

Along comes the defense program: airplanes to be built, steels welded, new tools pointed for new machines, trained men needed desperately that industry might change from peace to preparedness.

Tonight, in every large city, in many a tiny village, in the central school at the crossroads, the lights in the schoolhouse burn brightly all night long. Men are at work learning how to help their country. Twenty-four hours out of twenty-four, practical instruction is being given by skilled, understanding instructors.

Without fuss or fuming, without quibbling about overwork or lengthened hours, without chatter of profits or percentages, the school administrators of America have undertaken the program of preparedness and the school staff is lending a hand.

Democracy, as exemplified by one of its fundamental institutions, is at the alert. The public schools are on the job. Education has enlisted for the duration.

• •

JANUARY is an important milestone in the history of educational literature for it marks two complete years during which Chalk Dust has appeared in The NATION'S SCHOOLS. It is somewhat sad to contemplate the quantity of valuable paper that has been sacrificed during that time and any director of research would go quietly crazy (if not already that way) in trying to estimate the infinitives that have been taken for a one-way ride and the violated licenses that have featured the versification.

Who would have dreamed, Arthur, that you and I could have stood each other for so long a time without cracking under the strain? You, with your contempt for anything this side of perfection, your insufferable attitude of omnipotence and your hard-boiled lack of sentimentality—and I, with my pixilated sense of incongruities in the educational world, my throbbing heartburn for the underprivileged teacher and my naïve attempt to uplift the profession.

Chalk Dust will continue its militant crusade; we will fight for more democracy in the classroom and less stuffed shirts among the elect. We will struggle for the elemental right of each harassed, unloved and unappreciated school administrator to take a little snicker for himself when no one is looking. Further than this, we dare not go.

• •

THE year has gone. It wasn't a good year as years go but it was the best one around here, anyway. Some schools took a little more financial beating than they could afford and some children suffered. Some teachers had more than their share of petty irritations and annoyances and interference from a public that is scared and confused.

Some few educators got mixed up in the mazes of methodology and progressivism and forgot the main point of their reason for being. Some of us lost our jobs because we think that a principle is more important than where we are going to eat next Monday and others played musical chairs simply because the board of education didn't like their faces. Some of us got better jobs and some retired to think it over.

But, all in all, we carried on and here we are ready for the 1941 resolutions:

1. To the best of my ability I will fight the classroom jitters. The only place left where the children of the storm may find a haven of happiness and encouragement is the public school classroom. I will prepare myself physically, mentally and spiritually to see that my classroom carries out this concept.

2. I will teach and practice Americanism. The most important task today is to preserve and improve the democracy. This is a fundamental purpose of the school.

3. I will refuse to be bothered because the public does not realize my paramount importance in the great scheme of things. I will go on teaching school as well as I can, with a proud knowledge that I am contributing a bit of helpfulness to a shaken and trembling world.

Examinations or Credentials

In Hiring Classroom Teachers

ALBERT LINDSAY ROWLAND
President, State Teachers College, Shippensburg, Pa.

IN FEBRUARY 1940 I was asked to appear on the program of the national meeting of the American Association of Teachers Colleges to present my opposing opinion to the already widely heralded national teacher examinations which were to establish uniform standards of teacher competence throughout the United States.

Dr. Ben Wood, director of the Cooperative Test Service and an accepted authority on the development and the scoring of objective tests, had been selected by the National Committee on Teacher Examinations, appointed by the American Council on Education, to devise examinations which might be applied generally throughout the country to provide superintendents of schools with an objective means of selection from the candidates applying for teaching positions under their supervision. Doctor Wood appeared on the same program and presented with clarity and with modesty arguments in behalf of such a nation-wide standard of appraisal. Since that time articles have appeared in the *Harvard Educational Review* and elsewhere and educational programs have contained a further discussion of this matter.

A great many people can be happy only in the contemplation of uniformity. Such people are impelled to produce uniformity in everything over which they have any measure of control and, when uniformity or some semblance of it is thus achieved, they proudly and confidently assume that their efforts will be applauded. Unfortunately, this assumption is too often correct, for the human mind has a passion for neatness which is wholly unrelated to efficiency and a devotion to logic in a distinctly illogical universe.

Nature abhors uniformity. Yet we fatuously cling to our logical assumptions of uniformity. We uniform our soldiers; we regiment our children in school. We give rating and grading examinations to all sorts of people that we may classify them into all sorts of groups for the purpose of achieving uniformity. We establish norms and averages to which no one completely conforms. We develop statistics that carefully obscure individuality. In all this we find some strange satisfaction.

Now we seek to do this with our teachers, those whose peculiar function is to save our precious individuality from destruction and allow it to flower in its own way to the glory of God and to the confusion of the uniformists. Horrified by the differences that they have found in the preparation of teachers for our schools, obsessed by the importance of having all the children of all the people taught the same things in the same way by the same kind of teachers, certain outstanding educators have called upon the American Council on Education to appoint a committee to devise examinations for teachers that may be applied impartially from California to Maine and from the Canadian border to the Gulf.

Ignoring the differing abilities of states to support education, ignoring the cultural levels that prevail in different parts of the country, ignoring the individualities of the teacher education institutions, ignoring the personal and spiritual contributions of certain inspiring leaders, they would devise a uniform that all teachers must wear. Each will bear a card attesting that he has passed the national examinations.

Teaching competence cannot be determined by uniform national examinations, warns President Rowland, for uniformity destroys individuality, the characteristic that has made American education distinctive and America a democratic country

Behind this front, of course, will be the inevitable differences that exist between human beings whatever their training and however alike they may appear. But these differences will be suppressed. They will become something of which to be ashamed. Pride will be felt in belonging to the great army of passers of national examinations. To be an alumnus of the Iowa State Teachers' College, of Montclair, N. J., or Shippensburg, Pa., will be unimportant in comparison. Indeed it will be unimportant, for these colleges will have standardized their curricular offerings in terms of these national examinations. The factual knowledge required to pass successfully these examinations will have superior value and commanding importance over all other elements of teacher education. The worth of a teachers' college will be estimated upon the percentage of its students who pass these examinations and upon their percentile, their decile or their quartile rank.

Proponents of the examinations for teachers point to the similar examinations generally in use for admission to the medical and legal professions. It is argued that these important technical services should provide a pattern for the teaching profession.

A thoughtful review of the history of these professions discloses, however, that these examinations were established long before there were adequate technical institutions for the education of physicians and lawyers. Time was when association with a reputable physician and the occupancy of a desk in a lawyer's office were the only official requirements for admission to these professions, in addition to the passing of the state board examinations. There was no guarantee of similar training

and equivalent achievement on the part of the candidates for the coveted licenses to practice upon the lay public. Obviously, society had to protect itself against quackery and fraud.

However, as the medical schools and law schools set standards for themselves and merit the respect and confidence of the professions that they serve, more and more reliance is placed upon the recommendations of these institutions. Already, graduation from accepted and accredited schools in these fields is regarded as adequate evidence of competence and the examinations are continued largely because of established custom.

In the case of teachers, however, as teacher education institutions, and especially the publicly supported teachers' colleges, were established and required to conform to sound and recognized standards involving admission requirements, curriculums, faculty and graduation, the old form of local, county and even state examinations for teachers' certificates was gradually abandoned in favor of credentials showing the satisfactory completion of adequate curriculums in approved institutions.

Credentials Widely Approved

This change met with hearty approval from all sources, including professionally minded teachers on the one hand and experts and leaders in the field of education on the other; perhaps no single step contributed so largely to the improved professional competence of teachers as this. Teachers were now required to attend reputable institutions for substantial periods of time: at first, two years beyond high school; then, three, and, now, generally throughout the country, for four years of post high school professional training. No longer could teachers cram for examinations by a few weeks of intensive effort under skillful tutors. Everywhere was this contribution to the improvement of the teaching service applauded.

This practice ensures that the holder of a teacher's certificate has attended an institution designed for the education of teachers and has over a substantial period of time pursued courses of study under professors who are competent specialists in their several fields. It further guarantees that such a teacher has lived in association with the faculty and students of his college and in this association has disclosed his quality of mind and heart, his attitudes, his tastes and ideals, his intellectual and moral standards—in short, his character—with a clarity utterly impossible through the medium of any examination however skillfully constructed and of whatever length.

It is, I believe, difficult to overemphasize the importance of this distinction between the credential attesting to four years of collegiate technical education under complete instruction and leadership in an approved and respectable academic and professional institution and evidence of passing a written and oral examination necessarily limited by time and circumstance to at best a superficial disclosure of the candidate's quality and competence.

Yet, having made this altogether admirable advance from the examination method of certifying teachers to certification based upon a review of credentials from an approved and professionally organized institution subject to inspection and control, the proposal is now made to reestablish the examination system. This is, in my opinion, most definitely a step backward because it substitutes a mechanical and superficial basis of judgment in the selection of persons to render the supremely important social service of teaching for the collective opinion of college faculty members who have had a rich and long opportunity to become acquainted with the candidate in a wide variety of situations revealing of his fitness or unfitness for teaching and who may also be supposed to be just as jealous of the quality of the teaching service as are the examiners.

Likely to Be Sole Criterion

It must here be said for Doctor Wood and his associates responsible for these national teacher examinations that they deplore as much as I do any tendency to force human beings into a common mold and to impose a blind mechanical measure of their abilities. In the description of the examinations and in the instruction for their use, emphasis is laid on the fact that there are many qualities desirable and even basically necessary in a teacher that are not revealed by the examination and, therefore, the examination should not be the sole or even the chief criterion in the selection of teacher personnel.

This is wholly commendable. I differ from Doctor Wood in the fear which I have and which he does not share that these examinations, supported by the powerful prestige of the American Council on Education and its committee on teacher examinations and executed by the scarcely less potent figure of Doctor Wood himself, will so charm the average school administrator by their excellence, their uniformity, their impartiality and their ease of administration that all other elements and forms of appraisal will shrink to negligible proportions in comparison and that the passing of these examinations will become substantially the sole basis for teacher selection.

Tests Stifle Originality

When and if such a development takes place the teacher education institution will, perforce, take its cue from the examinations, the passing of which becomes the all important objective of the prospective teacher. Curriculums and courses of study become adjusted to the anticipated content of the examinations; lists of former questions become the important texts for study; instruction becomes tutoring for these examinations, and the reputation of a particular teachers' college is measured by the success of its graduates in the national teacher examinations. All spontaneity, all originality, all experimentation will disappear and even the examinations themselves will become so stilted and repetitious that Doctor Wood will in despair, as a man of intellectual integrity, be forced to establish an experimental teachers' college where, freed from the dead hand of the examinations, new and untried modes of thought and procedure may be born.

Let educators, therefore, view with alarm and adopt with caution this proposed plan for the determination of teacher competence and for the selection of teaching personnel. Let us not, in our devotion to standards, lose the spirit which has made American education the unique and distinctive thing that it has been in the development of the peculiar genius of American democracy.

Let's Talk *Sense*

A Progressive Talks Back

PAUL J. MISNER
Superintendent, Glencoe, Ill.

WE ARE living in a cockeyed and confused period of human history. In all areas of human relationships there is evidence of uncertainty and unrest. Few persons can agree upon the precise functions that their governments should perform. There is conflict of opinions concerning the rôle of religion in meeting changed and changing conditions. Conventional notions of ethical and moral conduct are being consistently questioned. Thinking people freely admit that they are bewildered by the rapidity of social change and are seeking diligently to adjust themselves to new needs and conditions.

In the midst of all this confusion it is altogether impossible to expect that organized education should remain unscathed. Nor should it. Honest, searching criticism of all social institutions is completely essential to the improvement of the democratic way of life. Change for the mere sake of change is bad social policy. Change based upon new knowledge and adequate experimentation is that without which the democratic way of life cannot long endure.

Needed and desirable reforms in religion have suffered at the hands of a few fanatics. This articulate minority has often discredited the honest efforts of their colleagues who patiently seek the improvement of religious services to a spiritually sick world. Demagogues and predatory politicians cause people to despair of any real improvement in the relationships between man and his government. Crackpots force people to be skeptical of all proposals that are made to improve social relationships. Quacks destroy faith in the professional practice of medicine.

Similarly, the progressive education movement has suffered at the hands of a few persons who have reflected more heat than light in their public utterances. Likewise, the movement has suffered at the hands of a few individuals who have called their practices progressive education when such practices would never be acceptable to the rank and file of progressive educators. The reactionary person can always find some obscure evidences of malpractice in any area of human endeavor. To indict an entire movement on the basis of such evidence is to confuse thinking rather than to clarify it.

The association of the term "progressive" with a few widely publicized school systems has resulted in some unfortunate interpretations. Critics have been inclined to confuse a particular plan with the broader implications of the movement. Progressivism is not a pattern, a plan or a panacea. It is essentially an attitude of mind, a way of thinking and behaving. The progressive educator is simply a person who accepts the reality of a changing world. He knows that education should help individuals become increasingly intelligent about the world in which they live, not merely the world in which their grandfathers lived. He does not arrogantly assume that he knows all the answers or that he has developed the perfect plan by means of which mankind can be led from darkness into light. He does not interpret graduation from college as the end of cerebration. He realizes that new knowledge from the fields of biology, anthropology, sociology and psychology furnishes a basis for improving the learning process. He knows that changed conditions of human living impose new demands upon the schools and he seeks diligently to meet these demands.

Progressivism is not a pattern, a plan or a panacea. It is essentially an attitude of mind, a way of thinking and of behaving. The progressive educator is simply a person who accepts the reality of a changing world. He knows that changed conditions of human living impose new demands upon the schools and educators

In behaving thus the progressive educator is like all other individuals who are seeking to survive. The business man adopts new technics of advertising. The dentist installs new x-ray equipment. The farmer replaces his horses with a tractor. The family physician attends postgraduate clinics. All such behavior is progressive. Parents do not employ nonprogressive dentists or physicians. Neither do they want their children under the supervision of teachers who have ceased to learn and who assume that all significant knowledge was accumulated between the Age of Pericles and the end of the Harding administration. As progressive education frees itself from the notions that it is a reform or uplift movement sponsored by wild-eyed theorists, lay citizens will not only accept its fundamental principles but will insist that the reactionaries do likewise.

Discipline is always one of the straw men that are created in any argument concerning progressive education. Critics of the movement insist that children in progressive schools are permitted to do as they please. No real progressive would ever accept such an interpretation. American schools are charged with the responsibility of preparing persons for effective participation in a democratic society. A primary prerequisite for citizenship in a democracy is the ability to think. Traditional schools do not teach children to think. They tell them what to think. Discipline in these schools is

essentially a matter of blind obedience and conformity. Education based on this concept of discipline is not preparation for democracy but for dictatorship.

Progressive schools provide children with opportunities to plan their learning activities in cooperation with their fellows and with the sympathetic guidance of the teacher. The result of such cooperative planning is not capricious or impulsive action but action based upon thinking and clearly defined purposes. Discipline is obtained because children know what they are doing and why they are doing it. Democracy is emphasized because children are becoming increasingly aware of their individual responsibilities to the other members of the group. American parents do not want their children prepared for the rule of a Hitler, a Mussolini or a Stalin. As they are helped to understand the deeper significance of the discipline that is being developed in progressive schools everywhere they will approve.

Confused Criticisms

The meaning and function of interest are frequently confused by the superficial critics of progressive schools. To these individuals it means that children shall learn only what they wish to learn. Children shall not study history unless they like it. Spelling must be sugar-coated through wild, vociferous play if children are to learn to spell. Such criticisms are so naïve that they scarcely justify an answer.

Progressive education does not interpret interest to mean that the fleeting fancies and whims of children shall be made the basis of learning experiences. It recognizes that children are living here and now in a real world. As a result of their daily living experiences children become curious about many things. They raise questions about the things they see in the movies, hear over the radio or read in the newspapers. They meet real life problems that require both knowledge and skill for their solution.

On the basis of these experiences the school helps children to use history, science, mathematics and literature as the means of extending their experiences and of gaining control over their environments. When the progressive educator seeks to relate learning experiences to the recognized needs, interests and purposes of children, he is not engaged in sugar-coating the learning process. Rather, he is substituting functional and meaningful knowledge and skills for the barren abstractions and verbalizations that have characterized much of traditional education.

Closely related to these problems of discipline and interest is the charge made by critics that progressive education minimizes the importance of subject matter. In fifteen years of experience in progressive schools I have never been aware of the mass disrespect for Latin and Greek to which a recent critic of progressive education refers. It is true that progressive educators have recognized the utter futility of forcing the large majority of high school pupils who will never attend college to enroll in subjects for which they have no aptitude or interest. Rather, progressive education has sought to know the needs, interests and abilities of its individual pupils to the end that the content of learning might have significance and value for them. The traditional high school forces all of its pupils to prepare for college knowing full well that only 10 per cent of them will attend.

Any person who will take the time to talk with the pupils enrolled in one of these traditional secondary schools will quickly discover that the professed devotion of the teachers for subject matter is not shared by the learners. Most college and university graduates agree that their real education began when they were faced with the problems that life presented. They admit that much to which they were exposed in school and college failed to function in real life situations. It is precisely this condition that progressive schools are attempting to remedy.

History Interprets the Present

The study of history increases in importance when it is employed as a means of understanding the present. The high school pupils, aware of present tendencies toward greater participation of the federal government in local affairs, find the controversies between Hamilton and Jefferson particularly significant. The contributions of mathematics increase in value when they can be employed by learners in solving problems that arise in the daily experiences of living. The boys and girls who order milk, distribute it to the other boys and girls, collect the money, keep accurate accounts and pay the bills are not being entertained. They are using numbers and not parroting abstract concepts that have little or no meaning for them.

Making Literature Meaningful

Skill in the effective use of language is increased when it is consciously employed by pupils as a means of communication. The high school pupils who study the problem of conservation and prepare a report suggesting better ways of conserving community resources are learning to write as well, certainly, as those pupils whose English teacher requires them all to write on the subject, "The Most Exciting Experience I Have Ever Had." Literature becomes meaningful to pupils when they recognize that it represents an interpretation of the same problems that have always confounded mankind in his search for truth, beauty and justice.

The average layman is likely to insist that "the university of hard knocks" provides the best kind of education. Through a common-sense interpretation of the functional use of subject-matter it is possible to help him see that progressive education is attempting to stress this ideal of the value of experience as the basis of learning. Fortunately for the progressive, this concept of functional education can no longer be dismissed as just an ideal or a theory. Recent researches, particularly those by Wrightstone at Ohio State University, show conclusively that pupils in progressive schools learn the three R's just as well as do the pupils in traditional schools. In addition, Wrightstone's research shows that pupils in progressive schools are distinctly superior in cooperation, initiative and creative thinking.

The present distressed condition of world affairs will undoubtedly cause public education to be the subject of attack by groups outside the teaching profession during the days that lie ahead. Would it not be wise for progressives and conservatives alike to recognize the nebulous character of their differences and seek to talk sense about education?

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Can Small High Schools

Support Interscholastic Athletics?

CLAUDE MITCHELL
Superintendent, West Newton, Pa.

THE two greatest items of expenditure upon the budget for athletics are equipment and officials. The amount spent for equipment is somewhat of a variable and depends upon the quality and quantity purchased. The cost of equipping a member of the football team alone is estimated at from $40 to $60. The expenditure for officials is a constant sufficiently stable to become the basis for comparisons and it is upon this constant that these comparisons have been made.

More fully to understand the financial situation of high school interscholastic athletics, I was appointed to study the budgets of the several high schools of Westmoreland County, Pennsylvania, and to report the findings. The study made includes 21 high schools, 75 per cent of the total number in the county.

It is reasonably safe to assume that most of the high schools with an enrollment of less than 200 will have serious difficulty in supporting interscholastic athletic programs. Since the Pennsylvania Interscholastic Athletic Association classifies schools upon the basis of enrollment, it is upon the basis of such classification that this study has been made.

Pay of Officials Rises Sharply

This classification is as follows: AA schools have an enrollment of 1000 pupils or more; A schools have an enrollment of 500 to 999, and B schools have an enrollment of 499 or less.

Of the schools sufficiently large to support interscholastic athletic programs, about 31 per cent are of the class B type; 33 per cent, of classes A and AA, while 36 per cent have less than 200 pupils and are not likely to have an interscholastic athletic program. In basketball, however, there are two classifications only, class A and class B. Class A in this sport includes all schools of classes AA and A.

Out of every dollar taken in at the gate of the class AA schools in Westmoreland County during the football season, 13.5 cents goes to pay officials; in class A schools, 19.5 cents, and in class B schools, 32.6 cents. Likewise, out of every dollar taken at the door of class A and AA schools during the basketball season, 28.5 cents goes to pay officials and in class B schools, 32.1 cents.

The average cost of officials for a game of football in 1935 was $23.33; in 1939 it had risen to $30.84, an increase of 32 per cent. Likewise, the average cost of officials for a game of basketball in 1935 was $6.31 and in 1938 it had reached $8.03, or an increase of 27 per cent.

Ask Yourself These Questions

Study of these data raises several questions:

1. Are high school athletics in the process of becoming commercialized?
2. How long can the average small high school continue interscholastic athletics under such conditions?
3. Has this type of extracurricular activity become too expensive for these high schools?
4. Can expenses be sufficiently reduced to make it possible to retain interscholastic athletics in the average small high school?
5. Are officials' fees out of proportion in comparison with the other items of the athletic budget?
6. Should all extracurricular activities that are not self-supporting be eliminated?
7. Have we a right to expect interscholastic athletics to be run or managed at a profit?
8. What percentage of the gate receipts in our interscholastic athletics should go for the payment of officials?

The following conclusions might reasonably be drawn as answers:

1. From the limited facts presented it appears that interscholastic athletics are becoming commercialized.
2. To answer definitely in terms of seasons or years how long the average small high school can continue interscholastic athletics under such conditions is not possible. As a business proposition, however, this practice cannot continue indefinitely.
3. At the present rate of expenditure and in the light of a number of examples one might conclude that this type of extracurricular activity has become rather expensive especially for small high schools.
4. Whether or not the expenses can be reduced to make the game possible in the small high school remains to be seen. Some reductions must come in the budget for equipment and officials if this is to be done.
5. Whether officials' fees are out of proportion in comparison with the other items of the athletic budget is difficult to determine. Since gate receipts are subject to fluctuations, officials' fees cannot remain constant.

To Quit or to Get Outside Funds?

6. Whether extracurricular activities that are not self-supporting should be eliminated is perhaps not easy to answer. The fact remains, however, that unless these activities can obtain funds from some other source, they must be eliminated.
7. Whether we have a right to expect interscholastic athletics to be operated at a profit must necessarily necessitate some serious thinking. Most school administrators, however, feel that there is not much inducement to retain them at a loss each year.
8. Again, this is a question upon which there is disagreement and no standards for judgment. The fact, however, that officials' fees in football have advanced 32 per cent and in basketball, 27 per cent since 1935 is a matter that should have some explanation, especially since the gate receipts in football actually showed a decrease during the same period.

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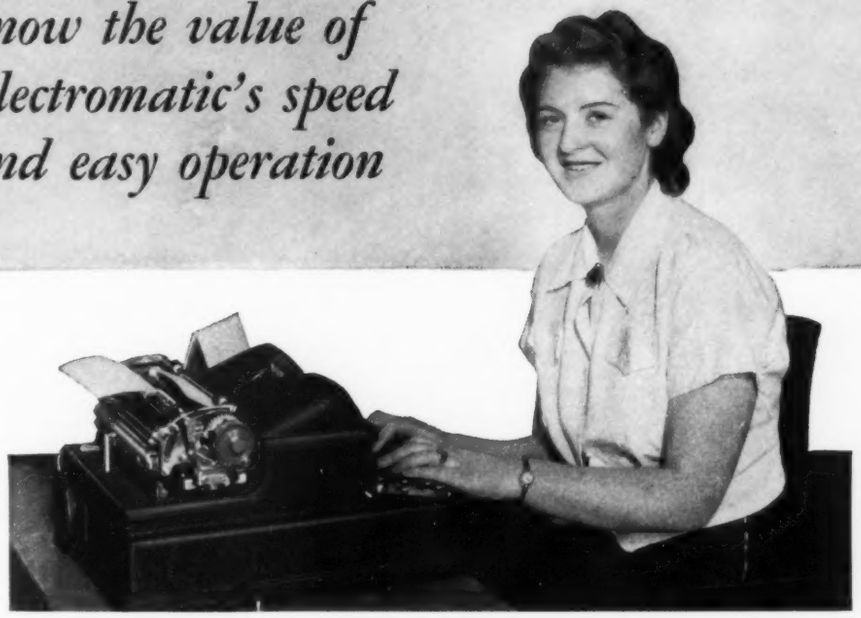

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Why a Minimum Salary Law?

HAZEL DAVIS

Assistant Director of Research
National Education Association

MINIMUM salary laws for teachers are in effect in half of the states. These 24 laws in general provide a salary floor below which no school board may go in fixing the compensation of a public school teacher. The federal wages and hours law and numerous state laws recognize the social importance of guaranteeing living wages to industrial workers. Minimum salary laws for teachers serve the same purpose in the realm of public education. Even when the minimum standard is low, some measure of protection is afforded to pupils and teachers in districts in which salaries would fall still lower in the absence of the state requirement.

This article summarizes briefly the existing minimum salary laws for teachers, giving special attention to recent developments. The final section reviews the argument for and against minimum salary laws, leading to the conclusion that these laws are a valuable feature of a state's educational program.

Related to State Aid

Minimum salary laws, like tenure and retirement legislation, are likely to be thought of as measures for teacher welfare. But the salary laws in many states are essential parts of the plan of state school support and equalization. In fact, a minimum salary law almost has to be related to the state aid system in order to be entirely effective.

Just as plans of state school support are different, so minimum salary laws are different. The following questions call attention to a few of the more obvious variations among state minimum salary standards:

1. Is the salary standard mandatory for all school districts or are there limitations and exemptions?

2. Who sets the actual cash amounts of the minimum salary standard, the legislature or the state board of education?

3. Is one flat rate salary fixed or is there a classification of salaries?

4. If salaries are classified, do the salary classes vary according to level of preparation, school position or population of school district?

5. Are increments for experience required as part of the minimum standard?

Answers to these questions, for each state, are given in a recent report by the research division of the National Education Association.[1] Certain facts may be noted by way of summary. The minimum salary standards are mandatory, without exceptions, in 14 states; mandatory, but with some limitation or exception, in seven states; optional in three. The amounts set as minimum salaries are written into the statutes themselves in 18 states; in six others the state board of education writes the schedule. Minimum salaries are classified in 16 states; a single flat rate minimum is provided in eight states. Preparation but not school level is the basis of classification in 10 states; school level but not preparation, in two states; both preparation and school level, in four states. Only three states classify salaries on the basis of city size. Increments for experience are required in 10 states.

Table 1—Minimum Requirements for Beginning Teachers Who Are College Graduates

State	*Minimum Salary for Minimum Term*	
	Monthly	*Annual*
Ala.	$ 75	$ 525
Calif.	—	1,320
Colo.	—	1,200
Del.	—	1,200
Ga.	70	490
Ind.	125	1,000
Iowa	50	450
Ky.	75	600
Md.	—	1,200
Mass.	—	750
Miss.	30	120
N. J.	100	900
N. Y. (rural districts)	80	760
N. C.	96	768
N. D.	45	315
Okla.	80	720
Ore.	85	680
Pa. (rural districts)	130	1,170
R. I.	—	650
Tenn. (elementary teachers)	90	720
Vt.	72	648
Wash.	100	1,200
W. Va.	110	990
Wis. (elementary teachers)	85	765

(In Alabama, Georgia, Maryland, Mississippi and North Carolina the minimum salaries for Negro teachers are lower than the amounts reported in this table. In New York, Pennsylvania and Wisconsin minimum salaries for teachers in cities of certain sizes are higher than the amounts shown here.)

In general, the salaries guaranteed by these minimum salary laws are low. Table 1 shows for each state the minimum annual salary required for a beginning teacher who is a college graduate. Of course, in a number of states the minimum salary is the same for college graduates and for those with less training but where there is a difference it is taken account of in this table. In three states the minimum salary is below $500; in only one does it exceed $1200. The median of these amounts is $755.

Four New Salary Laws

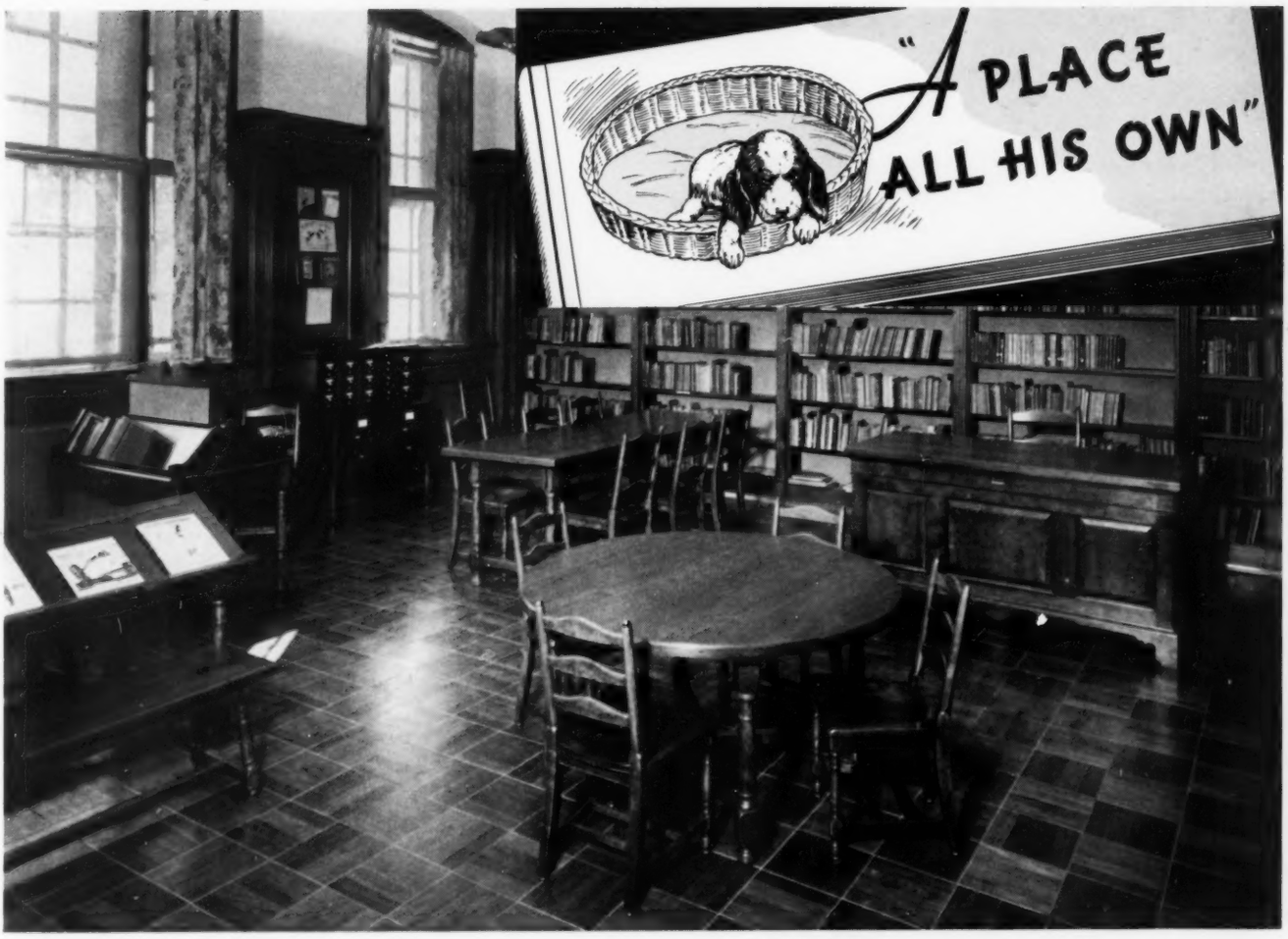
Four states have been added to the minimum salary list in the last decade; all four of these standards were authorized by 1937 legislation. These new laws do not fall into any one pattern but are of different types, as the following brief outlines show:

California: Flat rate minimum annual salary of $1320 fixed by legislature; no increments; mandatory for all districts.

Georgia: State board of education fixes minimum monthly salaries, classified on basis of certificate, mandatory for all districts. Salaries are set for 13 different certificates, ranging from $40 to $80 a month for white teachers and from $25 to $60 for Negro teachers. No increments are given for experience. The state itself provides funds to pay these basic salaries for a seven month term of school; local districts are encouraged to supplement that which the state provides.

Oklahoma: A minimum schedule of monthly salaries, recognizing

[1] State Minimum Salary Standards for Teachers, 1940. Washington, D. C.: The National Education Association, Research Division, 1940. P. 95. (Mimeo.) Single copies gratis.



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training and experience, has been approved by the state board of education and must be paid in full by districts qualifying in full for state aid. This schedule is summarized in table 2.

Washington: A minimum salary of $100 a month for twelve months is required by statute for all districts, except where 70 per cent of total revenues will not pay salaries on that basis.

Besides the four new laws, several older plans have been revised in the last decade. The actual amounts to be paid have been raised substantially in Delaware, Indiana, Maryland, New Jersey, North Carolina, Oregon and Wisconsin. The schedules in Delaware and Maryland have been reclassified so that they are now single salary schedules with no differences between high schools and grade schools. It should be noted also that of the four 1937 laws mentioned all provide the same minimum for elementary and for high school teachers.

Table 2—Minimum Monthly Salaries for Oklahoma Teachers, as Set by State Board.

Level of Preparation	*Years of Teaching Experience*					
	None	*1*	*2*	*3*	*4*	*5*
Master's degree	$ 85	$ 90	$ 95	$100	$105	$110
Bachelor's degree	80	85	90	95	100	—
90 semester hours, no degree	75	80	85	90	—	—
60-89 semester hours	70	75	80	85	—	—
40-59 semester hours	65	70	75	80	—	—
First grade certificate	—	55	60	65	—	—

The argument most often heard against minimum salary laws is this: "If the state sets a minimum salary, the local districts are likely to feel that their duty has been done when the bare minimum is met." In other words, the minimum will become the maximum. Such an argument is hard to defend when actual distributions of salaries are studied in states in which minimum salary laws are in effect. For example, the state of Washington in 1937 established $1200 as the minimum salary. Two years earlier, in 1934-35, 50 per cent of the teachers in the state were being paid less than $1200. But by 1939-40, 80 per cent of the teachers in Washington were being paid salaries higher than $1200. A good many districts in Washington, as in other states, are paying only the minimum required by law. Perhaps some of these districts would be paying higher salaries if no legal minimum had been set; it seems to be even more likely that many of them would be paying lower salaries than at present if no minimum salary law had been passed.

Those who work for minimum salary laws emphasize their value in the communities in which the schools are most in need of help. In every state a few school districts may be found in which educational leadership is so short-sighted that the cheapest teacher to be found will be employed, regardless of pupil welfare. This often means that some local girl will be hired and that part of her living expenses will be met by her family. The local girl may be potentially a good teacher. But, without an adequate salary she cannot travel, buy books and magazines, attend summer school, take part in civic and professional activities and thus continue to develop new resources of personality and education to bring to her teaching. No state can afford to permit any community within its borders to provide the kind of schooling that is represented by teachers who work at wages below the level of a self-respecting standard of living.

State aid alone will not guarantee the paying of defensible wages unless some closely guarded guarantee is present and is enforced. When equalization aid is available on an optional basis, some of the poorest districts may refuse to qualify for it. Likewise, some of the richer districts that are not eligible for equalization aid may choose to follow a niggardly policy in school support. The following statement from Illinois could be repeated for other states:

"There is evidence that in many districts emphasis is upon keeping tax rates as low as possible rather than upon keeping instructional standards high. In a recent study of 10 representative counties of Illinois it was found that among 430 one teacher districts with an assessed valuation above $85,000, and so not eligible for equalization, 75 levied for the educational fund at a rate of 25 cents or less. . . . Each of the 430 districts is paying its teachers less than $800. All of them could pay their teachers at least the proposed minimum by levying at a moderately higher rate. The state guarantees less able districts $1048 for educational purposes; surely there is no excuse for teachers' salaries ranging from $400 to $700."[2]

The privilege of maintaining a miserably poor school is denied to any school district in a state in which a reasonable minimum salary for teachers is made mandatory throughout the state, without exceptions, and where the state itself will make up the funds in communities unable to pay the minimum salaries from a reasonable local tax. Minimum salary laws are a protection to children and to teachers in setting a level below which competition for teaching positions may not operate. They are of especial value to rural schools, in which local leadership so often lacks educational vision. When allied with a sound plan of state school support, a minimum salary law in any state represents a step toward better teaching for the children most in need of better educational opportunities.

[2]"Minimum Salary Bills," (Editorial), Illinois Teacher **27**:22 (March) 1939.

Remedies for Tardiness?

"What would you do with pupils who come to school late?"

A school principal, Raymond J. Lewis of James Madison School, Scranton, Pa., asked this question of the Quiz Kids recently on their weekly NBC blue network broadcast.

Said Gerard Darrow, 8: "I'd take away from the tardy pupil special privileges, such as the library period or the next school movie."

William Wegener, 13, if he were principal, would embarrass the tardy pupil by calling for him at his home and accompanying him to school.

Jack Lucal, 14, would telephone the pupil's home, find the cause of tardiness and perhaps suggest to the parents that they buy a new alarm clock.

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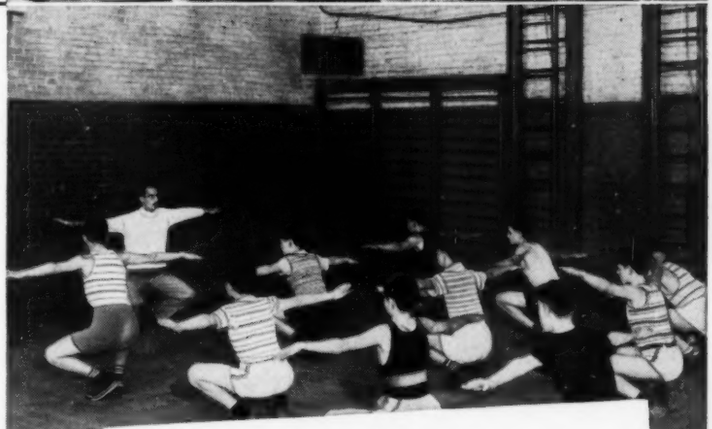

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The Right School for Every Pupil

M. M. CHAMBERS
Specialist in School Law

THE wide variations in the scope and quality of the instruction in different schools, the presence of modern facilities of transport and the increasing complexity of the world in which youth must be prepared to play a part—all these combine to multiply and accentuate the problem of making the right school accessible to every pupil, whether it be without or within his home district.

We have noticed hitherto that permitting pupils to cross district lines gives rise to much litigation because it tends to disorganize their home districts not only by reducing the pupil enrollment but also by causing the diminution of state subsidies based on the number of pupils. We have seen, too, that the district line is in many instances an effective and cruel barrier which deprives pupils of superior educational facilities almost within a stone's throw of their homes.[1]

District Lines Rigid

No glib solution is possible when there is a bona fide conflict between the best interests of a pupil and the preservation intact of the schools in the district of his residence. However, it would be well to remember that schools and school districts, like other institutions, often tend to perpetuate themselves in a rigid mold long after the welfare of their constituency requires changes. By and large, we must maintain the view that schools exist to serve pupils, not that children exist for the purpose of providing pupils for established schools or districts.

To be sure, a degree of stability in institutions is essential and all will agree that pupils should not be allowed to flit from school to school merely because of trivial whims. This principle is emphasized by the supreme court of Florida in a recent decision.

A Florida statute authorizes pupils to attend a school outside their home district if they obtain the consent of the trustees of the district they wish to attend and of the county board of public instruction. Under these circumstances the home district must pay the *pro rata* cost of their instruction. In Orange County one special tax school district having a total of about 80 pupils suddenly found that 50 of them were to be transported to the schools of a neighboring district. Now the salaries of teachers in Florida are paid in large part by the state and the state law prescribes that a school having fewer than 40 pupils shall not be entitled to more than one teacher. Hence, the district asked for an injunction against the county board, to restrain it from allowing the enrollment to be reduced below 40 pupils. The injunction was granted by the general trial court, effective at the end of the school year.

On appeal, the judgment was affirmed and the supreme court declared that the authority granted to the county board to approve or to disapprove the attendance and transportation of pupils of one special tax school district to another should be cautiously and carefully exercised "with an eye singular to the promotion and advancement of the school system and the best interest and welfare of the children."

No Authority for Transfer

On rehearing, the court went a bit further: "When a special tax school district is created, the necessary inference is that all pupils within said district are required to attend the school or schools located therein. There is no power vested in a board of public instruction to authorize their attendance or transportation to any other school or district except for reasons of convenience as contemplated by the statute. This refers to physical barriers and geographical conditions. . . . It is not controlled by caprice or preference."

The opinion concluded: "When a special tax school district is created it becomes the duty of the people resident therein . . . to maintain the integrity of the district and to support its school or schools by attending the one nearest them. It is begging the question to contend that the board of public instruction has the power to cart off to some other district more than half the pupils of one district for no other reason than that they prefer the other school. . . . This is not to be construed as holding that pupils of high school grade cannot be transported to a central high school when circumstances justify."[2]

District Pays Fees

A different type of case involving choice of a suitable school comes from Pennsylvania. The son of a resident of North Beaver Township, which maintains a public vocational school but no academic high school, attended the academic high school in the neighboring district of New Castle for two years, during which his home district paid his tuition. For the third year, however, the district refused to pay the fees, whereupon the parent paid them personally and then sued the district for reimbursement. A judgment in his favor was affirmed by the superior court. A statute authorizes pupils residing in a district maintaining no high school other than a vocational high school to attend the nearest academic high school and provides that in such cases tuition shall be paid by the home district.

Elaborating the meaning of this statute, the court said: "The line of demarcation between academic and vocational high schools is clearly drawn in the school laws of the commonwealth. The latter were designed for special purposes and to fit pupils for particular vocations, principally agricultural. The vocational school is intended to supplement the common educational system of the state but not to supplant any part of it and there is legislative authority supporting the election of this parent to send his son to a high school in which

[1] Choosing a Public School, The NATION'S SCHOOLS **25**:68 (June) 1940, and High Schools or Peasantry, The NATION'S SCHOOLS **23**:60 (March) 1939.

[2] Reaves et al *v.* Sadler et al., (Fla.), 189 So. 41 (1939).

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MERCUROCHROME, H. W. & D.

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academic education is the chief interest. The cost of the pupil's education must be borne by the school district of his residence."[3]

The foregoing case is encouraging but if anyone believes that good high school facilities are always open to qualified pupils throughout the country, let him look at a case that arose in the state of Ohio as recently as 1937. One section of the statutes authorized districts maintaining no high schools to enter into agreements with other districts for the reception of their high school pupils and provided further that, when no such agreement was made, a pupil holding a diploma from the eighth grade may select the high school he will attend if he notifies the clerk of his home district at least five days before the beginning of attendance. Another section stipulates that recognized eighth grade graduates shall be admitted to any high school without examination.

Relying on these provisions, a 16 year old graduate of the eighth grade in Woodlawn rural school district, near Cincinnati, chose to attend Withrow High School in that city but was refused admission. When he sought a writ of mandamus, his petition was denied and the judgment was affirmed by the appellate court. The conclusion was that the sections of the statute just mentioned did not make it mandatory for any high school to accept pupils applying under the circumstances described, nor did any other statute impose such a duty. The court properly decided that it had no right to presume that the refusal in this case was not predicated upon sound administrative discretion.[4] Obviously, a revamping of the statutes would be necessary to ensure that every qualified pupil in the state shall have convenient access to a good high school.

The care with which the courts avoid intruding upon the discretion of boards of education is also illustrated by another Ohio case. The Wilmington school district maintains four schools and assigns pupils to them according to the merits of each case and not according to geographical lines. A Negro parent whose eldest child had previously attended one school located half a mile from his home found that his younger children were assigned to another school 1¼ miles from his home. He asked the court to compel the admission of his children to the first school, averring that the second school was in fact a segregated school for colored children and that his children were denied the right to attend an elementary school in their district for which they were qualified, irrespective of their race or color.

His petition was denied and the judgment affirmed by the Ohio supreme court. There was nothing in the record to support the allegation that colored pupils were segregated. Furthermore, many pupils living near the first school were necessarily assigned to other schools because this was a congested part of the city. Bus transportation was furnished to all pupils living more than one mile from the school to which they were assigned and this was available to the complainant. The court summed up the case by quoting a section from the Ohio statutes which enunciates a well-known principle: "Boards of education may make such an assignment of the youth of their respective districts to the schools established by them as in their opinion best will promote the interests of education in their districts."[5]

It is well that the assignment of pupils should be at the discretion of local boards of education, except when malice or oppression can be proved. But a board is scarcely in a position to discharge this responsibility well unless it has under its jurisdiction a district at least large enough to operate several elementary and junior high schools, one or more cosmopolitan senior high schools and a public junior college.

In short, the typical school district should have 10,000 pupils within its borders. Instead of 120,000 school districts in the United States, there should be 3000. Prompt movement toward that goal is demanded by every consideration of educational welfare and administrative efficiency.

[3]School District of City of New Castle, Now for Use of Scherer, *v.* School District of North Beaver Township, (Pa. Super.), 14 A. (2d) 855 (1940).

[4]State ex rel. Wright *v.* Board of Education of City of Cincinnati et al., 57 Ohio App. 229, 13 N.E. (2d) 371 (1937), appeal dismissed 133 Ohio St. 65, 11 N.E. (2d) 701 (1937).

[5]State ex rel. Lewis et al. *v.* Board of Education of Wilmington School District et al., (Ohio St.), 28 N.E. (2d) 496 (1940).

Has Education Improved?

DO YOU think young people today are getting a better education in school than their parents received?

The foregoing question was put to a representative cross-section of the American public by the American Institute of Public Opinion in a study of education made for the American Youth Commission. An analysis of the replies has been published by N.E.A.'s research division under the title, "What People Think About Youth and Education."

To the foregoing question, 85 per cent of the population answered "yes, better"; 6 per cent answered "about the same"; 7 per cent thought it was poorer; 2 per cent had no opinion.

When the replies are classified in terms of sex, economic level and the other factors, only minor differences are revealed. Briefly, these differences indicate that a higher opinion of education today is held by those under 50 years of age and the informed.

Opportunity was provided in connection with this question for respondents to say why they thought education today was better or poorer than it had been. Those who thought education had improved gave the following reasons:

	Per Cent
Have more schools and better equipment	27
Have better trained teachers	17
Have a variety of subjects and better course material	14
Have greater advantages and opportunities	13
Children are required to go to school longer	9
More money is spent on education	2
Other reasons given	3
	85

No tabulation was made of the few reasons given by those who thought education had not changed. The 7 per cent who thought education was poorer were distributed as follows:

	Per Cent
Not enough emphasis on fundamentals, too many frills	4
Children used to get more out of school for the time spent	1
Other reasons given	2
	7

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Lessons in *Food Guidance*

FLORENCE W. ROENIGK

Cafeteria Director, Alexander Hamilton School, Elizabeth, N. J.

THE most important duty of the school dietitian is to provide attractive, nourishing food at the lowest possible cost. However, it is also her duty to see that the pupils choose their lunches wisely. There is a vast discrepancy between our teachings of nutrition and the actual food that a child eats.

Seventh grade pupils entering the junior high schools at Elizabeth, N. J., have never had the privilege or the responsibility of choosing or buying a lunch in a school cafeteria. These pupils, it was felt, should be given information to help them and they should realize how much they would benefit from a wise choice of foods for lunch each day.

So a committee of dietitians has attempted to meet this problem by preparing guidance lessons. These are taught by the homeroom teachers during the regular weekly guidance period in each junior high school. Lessons on etiquette and care of property are included as it was felt that the pupils needed this information. The homeroom teachers have made favorable comments about these lessons and the pupils have gained much from them.

Let's examine guidance lesson No. 1, for example, which has for its subject "Etiquette in the Lunchroom." Its objective is "to discuss questions of table etiquette, specifically good manners, which should be practiced when having luncheon in the school cafeteria and at the same time to make such good manners habitual." Its aims are: "(1) to improve the manners of the pupils in the cafeteria; (2) to arouse an interest on the part of the pupils in learning to eat correctly, and (3) to discuss table manners in such a way that they will be practiced not only in the cafeteria but in all social situations."

Instruction includes these details:

The cafeteria at Collinwood High School, Cleveland, is a beehive at noon.

Use of Napkin
- Where to put napkin.
- How to use it.
- How to dispose of it when finished.

Silver
- Fork
  - How to hold it correctly.
  - How to place it when not in use.
- Knife
  - How to hold it correctly.
  - Warning against its use to convey food to mouth.
  - Where to place it when not in use.
- Teaspoon
  - Where to place it when finished.
- Soup spoon
  - How to convey soup to mouth.

Posture at Table
- Sit and rise from left side of the chair.
- Sit straight and at comfortable distance from table.
- Keep elbows off table.
- Do not reach for food; ask to have it passed.

Conversation at Table
- Should be pleasant, as an aid to digestion.
- Should be cheerful and include everyone.
- Do not talk with food in the mouth.
- Wait until others finish speaking before talking.

Lesson No. 2 covers personal behavior in the lunchroom and the care of property. Its objectives are "to create in the pupil the desire to improve his behavior so that he is socially acceptable to his associates at all times; to develop a feeling of responsibility in keeping the school as attractive as possible, and to appreciate order and neatness in the lunchroom."

Following is the subject matter:

Consideration of Others
- On the way to the lunchroom, walk; do not run.
  - Stress dangers of accidents when running, especially on stairs.
- When in line:
  - Take your turn.
  - Do not push or shove.
  - Look where you are going; don't bump into pupils with trays.
  - Read menu before you get to counter.
  - Make decisions quickly and keep moving.
  - Do not touch food unless you intend to buy.

Be courteous to those serving behind counter.
Have money ready when you get to cashier.
Be courteous to cashier but do not visit with him.
Count your change before leaving the register as mistakes cannot be rectified later.
Do not take more straws, napkins or silver than necessary.

At table:
Talk in a normal tone; don't shout.
Take time to eat slowly; chew food thoroughly.
Do not tip back on chair legs or stand on rungs.
Never comb your hair at the table or apply makeup.
Never put chewing gum on trays, chairs and tables.
Never throw papers, napkins and orange peeling on the floor.

When finished with lunch:
Take your tray to the tray table, truck or receiving window at once and avoid congestion when bell rings.
Throw waste paper, milk cartons and straws in the proper receptacle.
Be careful that silver is not mixed with waste paper.
Leave table as clean as you found it.
Leave chairs or stools in place.

Care of Property
Do not mar walls, tables, chairs or other school property.
The cafeteria is a school project. When dishes are broken, trays are dented and silver is lost or bent, they must be replaced and paid for with cafeteria money.
A pleasant, attractive lunchroom will leave a lasting impression on visitors. Please do your share in maintaining a high standard.

To teach the pupils to be conscious of their buying habits and to choose their lunches wisely and intelligently is the objective of lesson No. 3. Its aim is "to emphasize the relation of food and health and to develop good food habits for lunch and other meals."

The subject matter is as follows:

Food and Health
Athletes in training are given plenty of milk, eggs, cheese and meat.
Body and muscle building foods.
A good daily portion of fruits and vegetables.
No sweets, pastry, coffee or tea.
Food important for good athletes is just as important for growing boys and girls who wish to take part in school athletics.

Getting your Money's Worth
Five cents spent for candy gives energy and fuel but candy should not be eaten in place of fruits, vegetables and milk. It should be eaten at the end of a meal or used in place of your dessert; it should not be eaten in addition to dessert.
Five cents' worth of cream or vegetable soup provides the following:
Minerals and vitamins needed to provide growth.
Muscle building foods.
A hot dish for your noon meal.
Five cents spent for egg, cheese or meat sandwiches provides muscle building foods and energy foods.
Five cents spent for milk desserts, such as tapioca, chocolate or butterscotch pudding and ice cream, provides the necessary milk for your noon meal.

In lesson No. 4, which is devoted to showing the school lunch, the objective is "to train the pupils in wise and proper food selection so that they will carry on these good food habits in future years." Its aim is to encourage the boys and girls to have a sense of responsibility in the choice of their food for lunch.

Included in the subject matter is the study of a typical cafeteria menu from the blackboard so that the pupils may study their choices of food. As a class activity it is suggested that each pupil write out his choice of lunches as follows:

Choose a lunch that would cost 20 cents, 15 cents and 10 cents.

If you have brought two egg sandwiches from home and have 10 cents to spend in the cafeteria, what choice will you make?

Examples of well-chosen lunches are as follows:

10 cents
Baked beans
Lettuce sandwich
Milk

15 cents
Vegetable soup
Hamburger roll *Ice cream*

20 cents
Split pea soup *Lettuce salad*
Spaghetti and tomatoes
Fruit cup

Lunches brought from home and 5 or 10 cents spent in cafeteria:
1 Tomato sandwich
1 Meat sandwich
Apple *Ice cream*

Tomato soup
2 Cheese sandwiches
Cake

Vegetable plate
2 Meat sandwiches
Cake

Lunches brought from home:
2 Ham sandwiches
2 Cookies
Apple

2 Peanut butter sandwiches
Cake
Tangerine

2 Tomato and lettuce sandwiches
2 Cookies

Cafeteria Setup at Elizabeth

THE school lunchrooms at Elizabeth, N. J., including the vocational school lunch, are under the centralized management of the office of the supervisor of home economics, Mary H. McDermott. Mrs. McDermott explains that all purchases for all of the school lunchrooms are made daily, weekly and monthly.

"Menus from the junior and senior high schools are filed weekly and all matters of policy concerning any of the school lunchrooms are handled in this office after conference with the superintendent of schools and business manager. If by chance a problem arises that needs the consideration of the board of education, this matter is referred to the chairman of the cafeteria committee of the board of education, which is made up of five of its members.

"All bills are submitted to the board of education on regular board of education forms and the same method of payment is used as would be used in the purchase of any other supplies or equipment for the schools. The school lunchrooms are entirely self-supporting after they have been equipped. It is our policy to keep our pay roll to the average level of 19 per cent of the daily receipts. Maintenance is based on life of equipment but averages approximately 4 per cent; administration averages from 2 to 3 per cent.

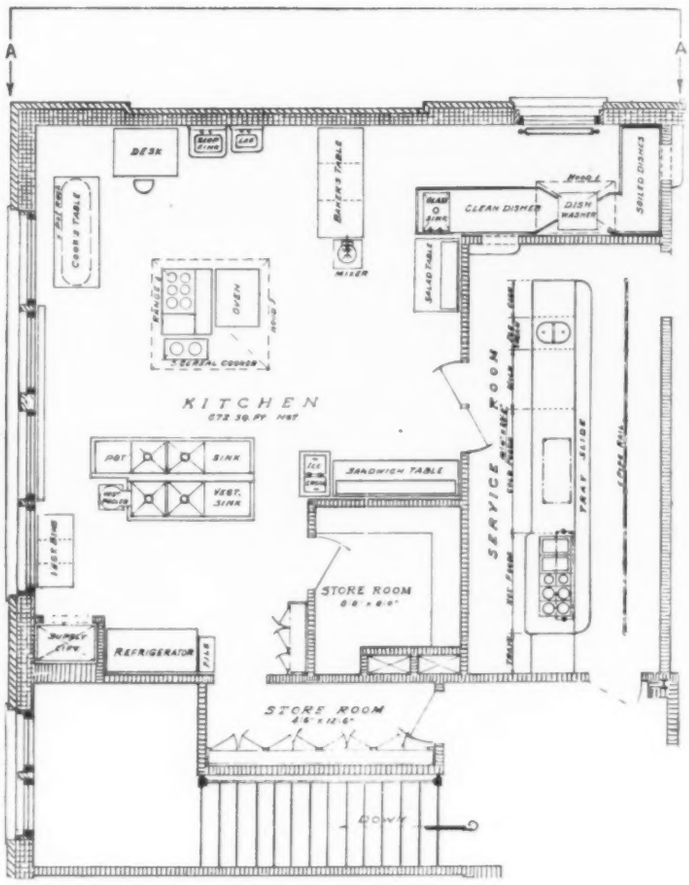
"Teachers are not paid an additional salary for assuming the management of the lunchroom. They are required to teach 15 periods a week (half of the regular teaching load). The other half of the time is paid for from sale of food."

Cafeteria at Onondaga Valley High School

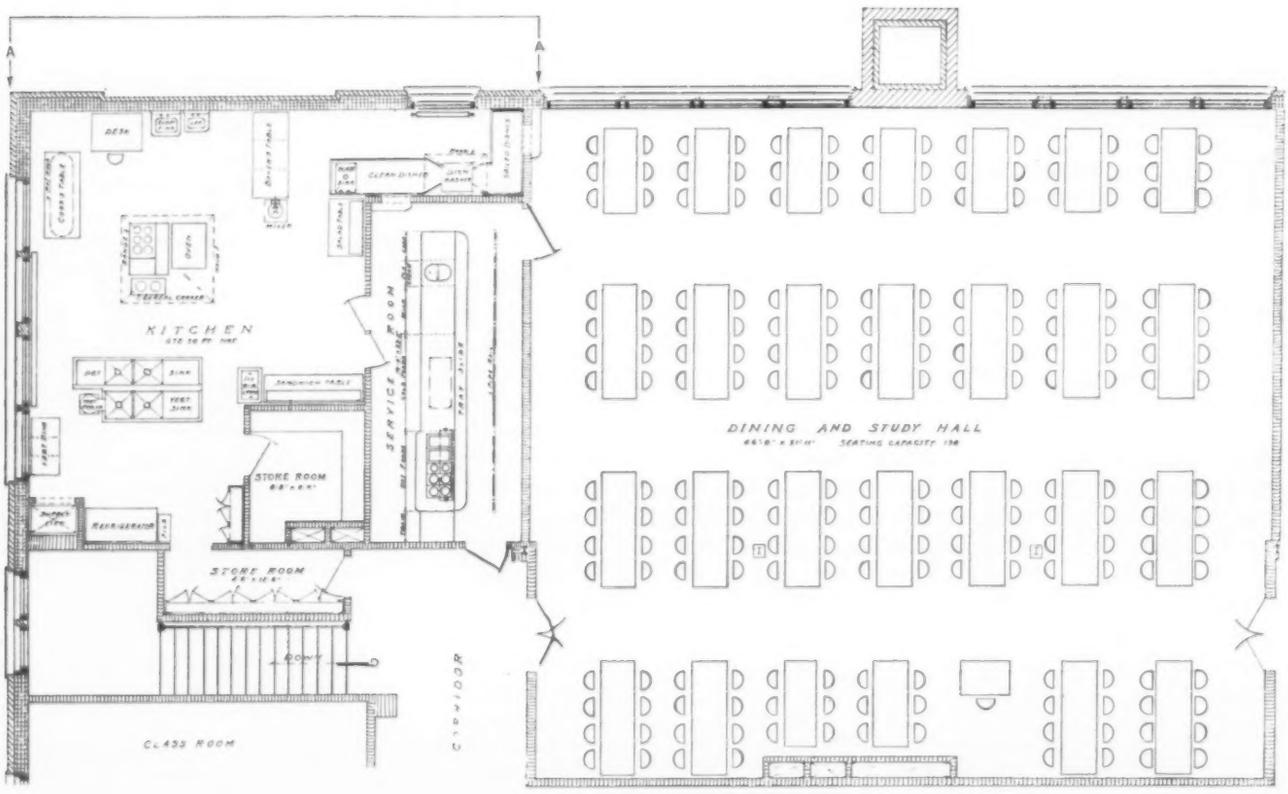
CERTAIN interesting features are to be noted in the layout of the cafeteria of the Onondaga Valley High School, Syracuse, N. Y. First, attention is directed to the excellent routing from the supply elevator to refrigerators, storerooms and preparation areas. Attention should likewise be directed to the convenient arrangement of the dish-washing unit, permitting the return of clean dishes through a window directly to the serving counter; also, the proximity of the sandwich table, ice cream storage and salad table to the serving area.

The bakers' unit is so arranged that the cook and baker may use the same mixer and oven. Wall storage cabinets in the corridor and storeroom are used for banquet china and surplus supplies of china, silver and linen.

Items of fabricated equipment throughout the kitchen and serving area are made of stainless steel.



Below: Plan of the cafeteria, Onondaga Valley High School at Syracuse, N. Y. Right: Enlarged plan of the kitchen showing details of arrangement and of equipment. See "A" to "A" on large plan below.



STREAM LINE
GAS COOKING EQUIPMENT
pays for itself in savings!

VULCAN 50th Anniversary

BATTERY OF VULCAN UNITS SHOWING HANDSOME APPEARANCE WHEN INSTALLED

You are paying for new cooking equipment whether you are buying any or not. You are paying for it with the steady stream of dollars that hidden losses are costing you – losses due to excessive fuel consumption, meat shrinkage and uncertain results. The new Vulcan equipment will soon pay for itself.

And – you will have smartly streamlined cooking equipment that you will be glad to have your customers inspect. You will give faster service and better cooked food. Your kitchen will be cooler and your staff more efficient.

The new Vulcan Stream Line is the latest advance in cooking equipment and has many new, important features of design.

WRITE FOR THE VULCAN CATALOG

See for yourself the immense superiority of Vulcan equipment. Learn also how you can get $5 to $12 more servings from every 50 lbs. of roast.

STANDARD
GAS EQUIPMENT CORPORATION
18 East 41st Street, New York
Boston; Philadelphia; Baltimore· Chicago; Aurora, Ill.
New Orleans; Los Angeles

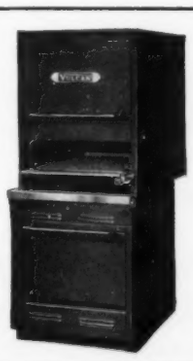
SUPER-SPEED and SUPER-ECONOMY WHERE 70% OF YOUR COOKING IS DONE!

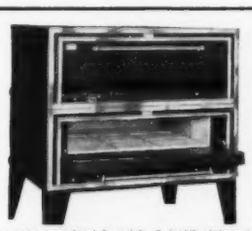
E VULCAN *Super* RADIAL-FIN TOP

When Vulcan introduced the Radial-Fin Top it brought about a real revolution in top cooking. The new *Super* Radial-Fin Top, with new ventilated range and cover plate, marks another big step forward. Top heating is speeded up, heat distribution improved, larger cooking area provided. A new "concentrated flame" 4-ring burner improves combustion, gives greater overall cooking heat and increased center heat—all without increased fuel consumption. As a result, top cooking costs are being cut as much as 20%. Available only on Vulcan ranges.

F NEW CERAMIC BROILER

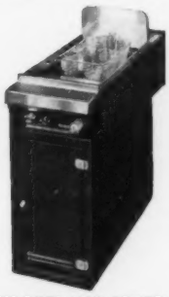
Clean, flush front. New center burners project flames to sides across ceramic radiants, giving superior, faster broiling qualities. Large oven heated by broiler burner does a multitude of cooking jobs.





NEW SECTIONAL BAKE OVEN

Each deck has its own burner and automatic heat control. Various temperatures can be maintained at one time in different decks. Heavily insulated. Patented multiple heat conduits assure even heat.



A NEW DEEP FAT FRYER

Heats faster — responds instantly when food is put in. Brings frying oil back to proper heat faster. Produces better looking, tastier, more saleable fried foods.

B NEW OPEN-TOP RANGE

New design burners—giant, circular non-clog. Faster, more economical. New smoother and heavier semi-solid top grates. Removable burner tray. Two-compartment, insulated oven. Oven heat control. Can be furnished with fry top.

C NEW TOP "EXPANDO" UNITS

Connect in battery and provide additional top area at a fraction of the cost of a complete range. 31⅛" wide. Can be connected right, left or both sides.

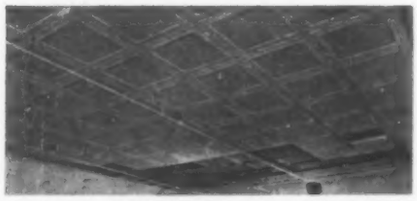
D NEW EVEN-HEAT TOP RANGE

Heated by 4 Vulcan aerated bar burners, lighted by pilot. Reinforcing ribs and nibs on underside of heavy top unit plates absorb and diffuse heat evenly.

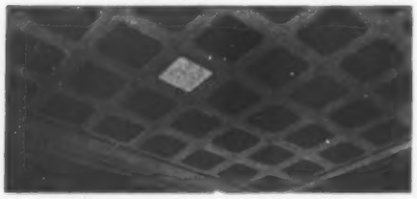
Carilli

METACOUSTIC CEILING

STOCK PATTERN METAL FORMS & SELECTED ACOUSTIC PANELS



Installation of Carilli Metacoustic Ceiling in the classroom at the Claflin School, Newton, Mass.



Installation of Carilli Metacoustic Ceiling at 1887 Centre Street, West Roxbury, Mass.

This system is a new, low cost ceiling construction, which incorporates numerous advantages not to be found in other methods.

Carilli Metacoustic is sound absorbing, fire-resistant, attractive and permanent, with lowest maintenance cost.

Also, additional thermal insulation may be omitted due to the fact that the tile panels serve in a dual capacity of affording sound absorption from 50% at 512 cycles; and thermal insulation up to 0.33 B.t.u.

Appreciable saving may be had in new construction if used in place of plaster ceilings; because there is no drying out or setting time required; and because metacoustic weighs between 1½ lbs., to 2 lbs., per sq. ft., compared with 9 to 11 lbs., per sq. ft. for plaster.

Acoustic tile is inserted into metal pans under pressure—cemented and nailed therein, in order to eliminate the common fault of falling or buckling.

Panels are delivered, sprayed with two coats of lead and oil paint, in standard colors and may be as simple or as ornate as desired.

In old construction where plaster has cracked or broken, metacoustic may be applied directly over same without delay, dirt or disarrangement.

This system is desirable and efficient for use in classrooms, cafeterias, auditoriums, churches and offices, to name a few.

Panels made in 2 standard sizes (24"x24" and 16"x16"). Either pressed fiber or fire-resistant acoustical plaster panels, rated at 1½ hrs. fire-resistance.

Sound absorption coefficients of samples of Carilli Metacoustic Ceiling. Test made in a reverberation chamber of M.I.T. by Professor William M. Hall.

CARILLI SYSTEM

281 Adams St., Boston

Kindly send me self-explanatory detail drawing and cost for complete installation of the Carilli Ceiling for

(name type) .....

Name .....

Address .....

City ..... State .....

Type of Business .....

News in Review

Military Leaves

In the majority of large cities the teacher who is drafted will be reinstated as soon as his military service is ended, most probably in the same position that he left to enter the Army, according to a survey made by the A.A.S.A. and the research division of the N.E.A. from a brief inquiry sent to superintendents in the 93 cities of more than 100,000 in population.

The teacher ordinarily will receive no pay from the board of education during his period of military duty and upon his return will receive either the same salary as before he left, or the same salary plus any experience increments he would have earned if he had continued teaching.

Four cities, Boston, Camden, N. J., Lowell, Mass., and Richmond, Va., report either an actual or proposed policy of paying to the absent employe at least a portion of the regular salary. In part of these cities the plan is to pay the absent teacher the difference between his Army pay and his regular salary; in others, to pay him the difference between his substitute's pay and his regular salary.

Roy W. Feik, superintendent at East Chicago, Ind., a city that does not come within the 100,000 population survey, reports to The NATION'S SCHOOLS that employes of the school city will be granted a leave of absence and will be reinstated in their positions at the termination of the leave. The time spent in the Selective Service will be considered the same as experience on the salary schedule.

INSTRUCTION

To Survey Job Problem

A plan to help high school principals in their efforts to aid pupils to become better adjusted occupationally after they leave school is now being introduced under the sponsorship of the National Association of Secondary School Principals.

Aided by a grant from the General Education Board, the association is carrying its project into the second year, trying out in various practical school situations the survey plan developed in an intensive study of six high schools last year.

The occupational follow-up and adjustment service plan involves the use of four instruments: (1) the follow-up record card upon which certain essential school and home background data are entered before the youth leaves school and upon which the data from the successive follow-ups are accumulated for the purpose of tabulation and cross analysis; (2) the postschool inventory, a questionnaire sent to all youths at one, three and five year intervals after they leave school; (3) the follow-up interview schedule, with which a selected sample of former pupils are interviewed, and (4) the employer interview schedule, with which a selected sample of the employers of the youth are interviewed.

A manual can be obtained from the director, Edward Landy, 425 West One Hundred Twenty-Third Street, New York City.

Languages as Core of Curriculum

The establishment of a school in which the study of foreign languages and the inter-relationship of languages in general would be the core of the curriculum has been proposed by Dr. Berthold L. Ullman of the University of Chicago. Doctor Ullman, who is a professor of Latin, emphasized the need for the study of foreign languages as a means of cultivating international good will. Aside from the study of foreign languages for education and peace objectives, Doctor Ullman cited the need of such study in the original text as the means of welding together our adverse elements of population.

Topical Study Guide

The editors of the "March of Time" have inaugurated a new service, called the *Topical Study Guide,* for the use of teachers in conjunction with current showings of their films. Each month a new study guide is issued, the current release being based on the news issue, "Arms and the Men—U.S.A.," now being shown in theaters.

Local theater managers arrange for teachers to receive a copy of the guide each month at the time they show the "March of Time" on the same subject.

Curriculum Council for Newark

Set up to guide a program of curriculum improvement in the schools of Newark, N. J., the Curriculum Council, under the chairmanship of Dr. Stanley H. Rolfe, superintendent, will include six members of the administrative staff, two members of parent-teacher associations, three principals, two vice principals and 11 teachers who were picked to yield a wide representation.

In launching the program, Doctor Rolfe told principals and teachers that

Coming Meetings

Jan. 3-4—Ohio Education Association, Columbus.
Feb. 6-8—Oklahoma Education Association, Tulsa.
Feb. 13-15—American Camping Association, Washington, D. C.
Feb. 19-22—National Vocational Guidance Conference, Atlantic City, N. J.
Feb. 19-22—Progressive Education Association, Philadelphia.
Feb. 20-22—International Council for Exceptional Children, New York City.
Feb. 22-27—American Association of School Administrators, Atlantic City, N. J.
Feb. 27-Mar. 1—American Association of Junior Colleges, Stevens Hotel, Chicago.
March 27-29—Midwest Conference on Rural Education, University of Illinois, Urbana.
April 16-18—National Catholic Educational Association, New Orleans.
March 6-9—Southern Conference for Music Education, Charlotte, N. C.
March 15-19—North Central Music Educators Conference, Des Moines, Iowa.
March 29-April 2—Northwest Music Educators Conference, Spokane, Wash.
April 6-9—California-Western Music Educators Conference, San Jose, Calif.
April 16-19—Southwestern Music Educators Conference, Wichita, Kan.
May 2-7—Eastern Music Educators Conference, Atlantic City, N. J.

declining population trends have meant sharp reduction in teacher appointments in the elementary field with the result that the schools have lost the impetus of new ideas brought in by younger appointees. "One of the consequences," he said, "is that the schools must devise their own program of in-service training to keep the teaching staff and school program in step with advances in the community."

Dr. Hollis L. Caswell, curriculum specialist at Columbia University, has been appointed consultant by the Newark board of education.

Abandons Free Education

Soviet Russia abandoned its policy of free universal education for high school and college students and for those studying in the various arts on October 3. Tuition in grades 8, 9, and 10 was set at 200 rubles per year in the cities and 150 rubles in the towns and villages, while college students were called upon for 400 rubles yearly in cities and 300 in the smaller towns.

Education in art, music and the theater was made even higher, being set at 500 rubles per year. The present value of the ruble is about 20 cents.

MEETINGS

Broadcast Conference

An estimated 1200 men and women directly concerned with broadcasting as a method of disseminating learning attended the fourth annual School Broadcast Conference in Chicago during December.

Nationally known figures in radio and education participated in the conference

FLOOR DEFENSE IS IMPORTANT TOO !

Only the correct types of floor seals—finishes and waxes can give your floors proper and economical protection from the destructive attack of winter's wet, grimy weather—Midland Products can take it!!—Interested??

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and both C.B.S. and N.B.C. conducted national programs from the meetings.

In addition to talks by leading figures in the field of radio education, the conference also included demonstrations of successful radio programs with school children enacting the various parts. The Wednesday "American School of the Air" program originated from the conference and five types of music broadcasts were presented.

Afternoons of the final two days were dedicated to work study groups, which considered radio writing and production, occupational programs and an evaluation of transcribed radio programs.

AWARDS

Doctor Graves to Receive Award

Dr. Frank P. Graves, president of the University of the State of New York and former commissioner of education until his retirement in 1940, has been elected the recipient of the 1941 American Education Award by the Associated Exhibitors of the National Education Association, the donors.

Presentation will be made during the convention of the A.A.S.A. at Atlantic City, N J., February 22 to 27.

Doctor Graves was associated with The NATION'S SCHOOLS before the publication of the first issue and was appointed a member of the editorial board in 1933 as specialist in state administration. A full biography of Doctor Graves appeared on page 19 of the September 1940 issue.

HEALTH

Blood of Members Typed

The Chicago Teachers Union has made plans to protect its members in sickness emergency through a volunteer blood donors' list. The blood of each member volunteer will be typed by the Civic Medical Center. This action was stimulated by calls for blood for desperately sick teachers. The union believes itself to be the first large lay organization to arrange for such far-seeing preventive medical action.

Films in Review

MARKET GARDENING. 16 *mm., silent.* 400 *feet.* 1 *reel.* 12 *minutes. Eastman Teaching Films Inc., Rochester, N. Y. Grades* 6 *to* 12. *Rating C.*

The purpose of this picture is to demonstrate how modern methods of gardening, under glass and out of doors, together with the development of rapid transportation and refrigeration processes, make fresh produce available to everyone throughout the year. This film can be used in grades 6 to 12. While especially suited to the teaching of vocational agriculture, it can also be used for consumer education, economics and foods and nutrition classes.

Unit 1 shows the construction of a greenhouse; the use of glass to let the sunlight in and to retain the heat, and the growing and harvesting of greenhouse lettuce, radishes and tomatoes. Unit 2 shows the laborers planting, tending and harvesting tomatoes, lettuce and celery in outdoor gardens. Unit 3 shows the marketing processes involved in getting the produce from the farm to the purchaser. One interesting scene depicts ice being put into refrigerator cars to preserve the food.

There is a lack of continuity in this picture. Not enough complete gardening processes are shown. A few scenes are difficult to follow because of inferior photography.—*Reviewed by* C. CLOYD MYERS.

NOTE: The foregoing film was reviewed by a Committee on Evaluation at the University of Michigan. Rating C indicates that the film will need careful preparation if pupils are to benefit.

Start Him Out with the Cleanliness Habit

Habits formed in youth remain through life—the cleanliness habit is easily formed when schools provide adequate sanitary clean washing facilities.

Bradley Washfountains are used in schools of all kinds—public, parochial and private—from kindergartens to colleges—in washrooms, classrooms, shops, entrances to cafeterias and other special locations. There's a model to meet your needs. Investigate now. Write for New 1941 Catalog. BRADLEY WASHFOUNTAIN CO., 2207 West Michigan Street, Milwaukee, Wisconsin.

BRADLEY WASHFOUNTAINS

On the Air During January

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System, the Mutual Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Sundays

10:30 a.m.—National Youth Orchestra (CBS).
11:30 a.m.-12:00 noon—Music and American Youth (NBC Red).
12:30-1:00 p.m.—Wings Over America. Stirring and significant story of aviation (NBC Red).
1:00-1:15 p.m.—I'm an American. A series devoted to expositions by distinguished naturalized Americans of the privileges and responsibilities of the democratic way of life (NBC Blue).
1:00-1:15 p.m.—March of Health (MBS).
1:30 p.m.—March of Games. Children's quiz game program, directed by Nila Mack (CBS).
1:30-2:00 p.m.—On Your Job. Dramas of America's work and workers, based on research by Frank Ernest Hill of the American Association for Adult Education (NBC Red).
2:00 p.m.—Brazilian Exchange Program (CBS).
2:00-2:15 p.m.—American Pilgrimage. Broadcasts from the homes of famous American authors (NBC Blue).
2:30-3:00 p.m.—University of Chicago Round Table (NBC Red).
2:30-2:45 p.m.—Foreign Policy Association Program (NBC Blue).
3:00 p.m.—New York Philharmonic-Symphony Orchestra. Directed by John Barbirolli. Deems Taylor, commentator (CBS).
3:00 p.m.—Columbia Symphony Orchestra (CBS).
3:00-4:00 p.m.—Great Plays. A series of masters' works tracing the development of drama (NBC Blue).
4:30 p.m.—Invitation to Learning. CBS Adult Education Board program (CBS).
4:30-5:00 p.m.—The World Is Yours. Produced by U. S. Office of Education and Smithsonian Institution (NBC Red).
4:30-5:00 p.m.—Pageant of Art. The dramatic story of fine arts through the ages (NBC Red).
7:30-8:00 p.m.—Speak Up, America. New quiz program developed to further better speech (NBC Blue).
8:00-8:45 p.m.—American Forum of the Air (MBS).
10:30 p.m.—Columbia Workshop. Produced by Douglas Coulter, CBS director of broadcasts.

Mondays

9:15-9:45 p.m.—American School of the Air: "Americans at Work" (CBS).[2]
2:30-3:00 p.m.—Rochester Civic Orchestra (NBC Blue).
3:45 p.m.—Columbia's Lecture Hall. Lectures on a variety of subjects by eminent speakers (CBS).
7:15-7:30 p.m.—Radio Magic. Dramatizations and commentary by Dr. Orestes H. Caldwell (NBC Blue).
10:00-10:15 p.m.—Story-Dramas by Olmsted. Dramatized versions of the world's great short stories. Nelson Olmsted portrays all of the characters in his dramas. Mondays, Tuesdays and Wednesdays (NBC Blue).
10:30-11:00 p.m.—Adventure in Reading (NBC Blue).
10:30-11:00 p.m.—National Radio Forum. Questions of national interest discussed by men in Washington who are working on answers to political, economic and social problems (NBC Blue).

Tuesdays

9:15-9:45 a.m.—American School of the Air: "Wellsprings of Music" (CBS).
2:30-3:00 p.m.—United States Army Band. Capt. Thomas F. Darcy, conductor (NBC Blue).
3:45 p.m.—Children Also Are People. Talks by specialists in the field of child welfare, presented in cooperation with the New York City Committee on Mental Hygiene of the New York State Charities Aid Association (CBS).
10:15 p.m.—Invitation to Learning. An informal discussion of the world's classics by Huntington Cairns, Allen Tate and Mark Van Doren (CBS).
10:30-11:00 p.m.—Meet Edward Weeks. The editor of the *Atlantic Monthly* discusses and dramatizes literature (NBC Blue).
11:15-11:30 p.m.—Human Nature in Action. Dr. Harold D. Lasswell, social psychologist, narrator (NBC Red).

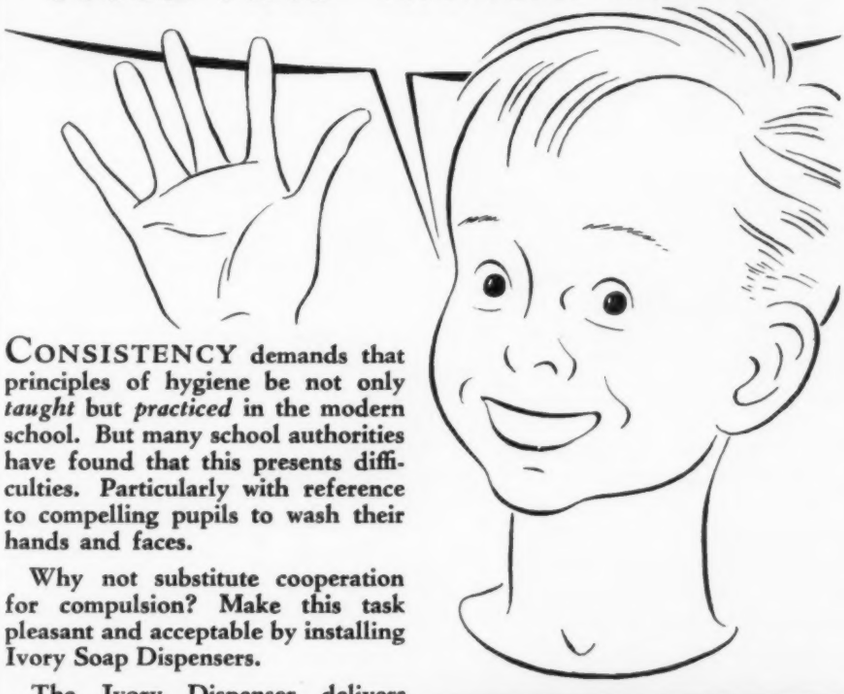
Wednesdays

9:15-9:45 a.m.—American School of the Air: "New Horizons" (CBS).
2:15-2:30 p.m.—Echoes of History. General Federation of Women's Clubs, producer (NBC Blue).
3:45 p.m.—Columbia Lecture Hall (CBS).
7:30-8:00 p.m.—Cavalcade of America. Dramatizations of American history (NBC Red).
8:00-8:30 p.m.—Quiz Kids. These children from the schools of Chicago and vicinity, all under 15, reveal an amazing fund of information (NBC Blue).
10:30-11:00 p.m.—Doctors at Work. Sixth annual health series presented by the American Medical Association (NBC Blue).

Thursdays

9:15-9:45 a.m.—American School of the Air: "Tales From Far and Near" (CBS).
12:00 noon-12:15 p.m.—Conservation Reporter (MBS).
12:15-12:45 p.m.—Navy School of Music (MBS).
3:45 p.m.—Adventures in Science. This program is planned in conjunction with Science Service (CBS).
9:35-10:30 p.m.—America's Town Meeting of the Air (NBC Blue).
10:30-11:00 p.m.—Musical Americana. Programs of American music with eminent soloists and symphony orchestra directed by Raymond Paige (NBC Red).
10:30-11:00 p.m.—The Listeners' Playhouse (NBC Red).
10:30-11:00 p.m.—Musical Americana. Programs of American music with symphony orchestra and mixed chorus directed by Raymond Paige (NBC Red).

WHO MINDS WASHING FACE AND HANDS NOW?



CONSISTENCY demands that principles of hygiene be not only *taught* but *practiced* in the modern school. But many school authorities have found that this presents difficulties. Particularly with reference to compelling pupils to wash their hands and faces.

Why not substitute cooperation for compulsion? Make this task pleasant and acceptable by installing Ivory Soap Dispensers.

The Ivory Dispenser delivers genuine Ivory Soap—a soap which both children and adults like because of its purity, rich lather, and gentleness. A soap, in fact, which makes the washing of faces and hands both safe and pleasant.

Ivory Dispensers are low in first cost and in upkeep. They are efficient and attractive. An illustrated folder tells all about them . . . write for it.

IVORY SOAP DISPENSERS

PROCTER & GAMBLE

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Nowhere Else! FOLDING FURNITURE *Like This!*

GANGED LIFT-SEAT CHAIRS—When set up in rows, permit occupants to stand up, raise seat, step back and allow others to pass in front of them. Still retain all advantages of compact folding and storage. Available in all Lyon chair models.

● Lyon Steel Folding Chairs are available with special *lift seats*, rigid detachable table Tablet arms, and many other distinctive features. The wide, deep, curved seats and "posture perfect" backs provide comfortable, healthful support for growing bodies. Non-skid design, pinch-proof hinges and smooth edges prevent accidents, and damage to clothing.

TABLET ARM CHAIR—Rigid and strong detachable tablet arm converts any current model Lyon folding chair into a practical, comfortable tablet arm chair. Chair can be folded for storage without removing arm.

Structural steel frames are exceptionally rigid and sturdy . . . meet the severe requirements of hard use in classrooms, assembly halls and gymnasiums. Five beautiful standard colors and four handsome "two-toned" finishes (at no extra cost) meet the decorative standards of the finest school interiors.

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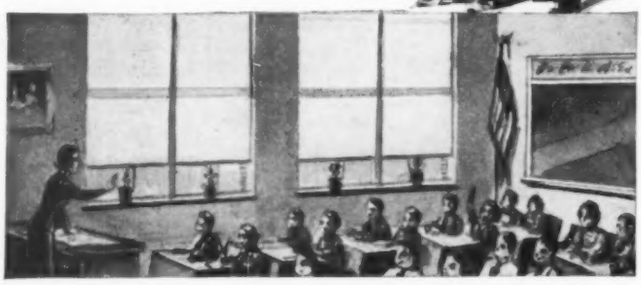
I Thought the School Was Empty, UNTIL—

I heard voices in the hall. I recognized one as Mike the janitor's, and wondered what he could be doing in the building on a Sunday afternoon. Must be showing the building to that friend of his.

I heard Mike say, "Pretty up-to-date school, eh, Carl?" "In some ways," Carl answered, "but I'll tell you one thing, your classrooms are a lot darker and gloomier than ours!" "Sure," said Mike . . . but that's because the shades are drawn." "Yeah, but that doesn't happen over at our school," Carl came back. "We've got 'Tontine'* shades and our rooms are light . . . even with the shades down!"



The following week when the "Tontine" dealer representative called I didn't say that I was busy. He gave me the whole story on "Tontine" shades—how they admit 140% more light without eye-straining glare (proved by laboratory tests), how they wouldn't crack, fray or pinhole, and how soap and water made them look like new! We tried them in one of the classrooms. Everyone was so pleased with the results that I gave the order then and there for "Tontine" shades to be placed throughout the school.

DU PONT

*"Tontine" is du Pont's registered trade-mark for its pyroxylin impregnated washable window shade cloth.

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WASHABLE **Window Shades**

E. I. DU PONT DE NEMOURS & CO. (Inc.)
NEWBURGH *"Tontine" Sales* NEW YORK

Fridays

9:15-9:45 a.m.—American School of the Air: "This Living World" (CBS).
2:00-3:00 p.m.—Music Appreciation Hour. Directed by Walter Damrosch (NBC).
2:30-3:00 p.m.—NBC Concert Orchestra (NBC Blue).
3:45 p.m.—Exploring Space. Stories of the constellations, Maude Bennot, director, Adler Planetarium, Chicago, commentator (CBS).
4:15-4:45 p.m.—University Life (MBS).
7:00-7:30 p.m.—Josef Marais. Folksongs of the African Bushveldt (NBC Blue).
9:30-10:00 p.m.—Everyman's Theater. A series of plays written and produced by Arch Oboler (NBC Red).
11:15-11:30 p.m.—The Story Behind the Headlines. Produced in cooperation with the American Historical Association. Cesar Saerchinger, commentator (NBC Red).
11:30-12:00 midnight — Unlimited Horizons. Produced in cooperation with the University of California, Stanford University and the California Institute of Technology. Dramas and discussions of the physical sciences (NBC Blue).

Saturdays

11:05 a.m.—Philharmonic-Symphony Young People's Concert. Rudolph Ganz, conductor (CBS).
12:30 p.m.—Let's Pretend. Dramatic adaptations of fairy tales and original fantasies by Nila Mack. Enacted by Junior Stock Company (CBS).
12:00 noon-12:25 p.m. — American Education Forum. Designed to interest laymen as well as educators (NBC Blue).
1:00-1:15 p.m.—This Wonderful World (MBS).
1:00-1:15 p.m.—Of Men and Books. Reviews of books and discussions of authors by Prof. John T. Frederick, Northwestern University (CBS).
1:15 p.m.—Highways to Health. Medical talks for the layman, arranged by the New York Academy of Medicine (CBS).
4:00-5:00 p.m.—Budapest String Quartet (NBC Red).
7:00 p.m.—People's Platform. Round table discussion of social, economic and political problems, Lyman Bryson, chairman (CBS).
8:15-8:30 p.m.—Man and the World. Produced in cooperation with the Chicago Museum of Science and Industry and the American Museum of Natural History of New York. A new series devoted to the men of science and their achievements (NBC Blue).
8:30 p.m.—The Human Adventure. Dramatizations of outstanding cultural and intellectual contributions of leading universities through the world. Presented by the University of Chicago and CBS.
9:35-10:00 p.m.—Listener's Playhouse. A series devoted to new radio writing and experimental production technics (NBC Blue).
10:00-11:30 p.m.—NBC Symphony Orchestra (NBC Blue).

[1]Except Sunday.
[2]The American School of the Air will be broadcast over the Columbia Broadcasting System stations from 9:15 to 9:45 a.m. E.S.T.; 2:30-2:55 p.m.; C.S.T.; 9:30-10:00 a.m., M.S.T., and 2:00-2:30 p.m., P.S.T.

PUBLICATIONS

Reports Are Less Elaborate

Two superintendents' annual reports that have come to our attention recently show a somewhat modified trend away from the pictorial type of report started a few years ago by New York City and subsequently used by most of the larger city school systems in the country.

New reports are illustrated with both photographs and charts but the trend is decidedly in favor of more reading matter. They also are far less elaborate than a year or so ago. Take, for instance, "Opportunities in Education," the 1939-40 report of Supt. S. T. Neveln of Austin, Minn. This is a 119 page mimeograph book with paper cover, which is well filled with explanatory tables. Photographs are snapshots reproduced by a photostat process and bound into the volume. A few printed pages with halftones are included.

"Your Cincinnati Schools," the report of Supt. Claude V. Courter for the year 1939-40, is attractively bound in a color map of the city. The frontispiece is a graphic presentation of the functional organization of the Cincinnati schools. It is well illustrated by photographs.

Film Production Booklet

"The Motion Picture Goes to School," a collection of discussions on school film production and allied subjects, issued by the committee on standards for motion pictures and newspapers of the National Council of Teachers of English, is now available to educators. The booklet may be obtained from Hardy R. Finch, the editor, at Greenwich High School, Greenwich, Conn. Requests should be accompanied by 20 cents to cover mailing costs.

It contains the following discussions: "Producing Motion Pictures; a Problem in Communication," by Edgar Dale; "The Problems of School Film Production," by Lillian McNulty; "Prospectus on Hollywood via Amateur Film Pro-

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Streaks and surface film vanish . . . dirt floats away. There's a sheen on the floor—lustrous—protective. With one sweep of the mop, your janitor completes 3 jobs soap can *never* do!

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That's because Spal's amazing formula offers an entirely new method of cleaning—a new expurging action that dissolves dirt, draws it to the surface, and *floats* it away.

But Spal does 2 extra jobs soap can *never* do. It polishes, and it protects. A specially developed light filler leaves a *lustrous film* that not only reveals the true beauty of the floor but also *guards the surface* from harm.

So get the facts about Spal. Make an actual "on-the-job" test and prove to yourself that Spal is made to give you *three times* more work, in less time, and at a lower cost, than any other cleanser you've ever used.

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Cleans by the New Expurging Action!

Gives Floors a Lustrous Polish!

Leaves a Film of Surface Protection!

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SPAL
LIQUID SCRUB COMPOUND

duction," by Eleanor D. Child; "The School Documentary Film as an English Activity," Donald Eldridge; "Enriching the Study of Literature by the Making of School Films," Maribel Richardson; "Teaching Library Technics by Visualized Procedure," Alexander B. Lewis and Lavinia Caprio La Manna; "The Motion Picture or Photoplay Club: Its Function in the Secondary School," Constance McCullough; "Life's Too Short" (a scenario for a safety teaching film), Godfrey M. Elliott; Bibliography on Movie Making.

VISUAL EDUCATION

C.C.C. Pioneers in Visual Education

In a typical school month 7402 educational films were shown in the nation's 1489 C.C.C. camps, an average of five per camp. Combined attendance was 575,028, an average of 78 enrollees per showing. Three out of four camps have 16 mm. projectors. Four of five have film strip projectors. One of seven has a photograph projector. A few have lantern slide equipment.

46 Films on Latin America

To give educators and other groups an idea of the 16 mm. film material available on the subject of Latin America, the International Film Center staff has listed and described some 46 films on that subject.

This listing might well be called an anthology. The films were selected from 470 available films, either on the basis of evaluations made by reputable organizations or as a result of direct examination by the staff of International Film Center. Hence, exclusion does not necessarily imply negative criticism.

The complete list of 470 films, including some 35 mm. sound films that are omitted from the selective list, may be examined at the office of the International Film Center, 45 Rockefeller Plaza, New York City.

It is hoped that this listing will stimulate production in the field of Latin American films, a subject that has been given inadequate coverage.

Americana Films

A new listing of Films Incorporated has been published in the form of an "Americana Films" folder. This folder is devoted only to films that have definite value for use in school programs on history, democracy, peace, national defense and patriotism. Several timely nontheatrical film subjects are included, such as "Conquest of the Air," a documentary film depicting the history and significance of aviation.

Southern Conference

More than 100 visual educators attended the fourth annual Southern Conference on Audio-Visual Education which met at Atlanta, November 14 to 16. On the program were several speakers of national reputation and a number of experts in the audio-visual field. Among those were Roger Albright, liaison officer of the Motion Picture Producers and Distributors of America; Leonard Power of the Federal Radio Education Council; Dr. Ellsworth C. Dent, educational director of R.C.A., and Floyd E. Brooker of the American Council on Education.

Film Releases

The Making of an Airplane Part—Taken in an airplane plant, the picture traces the making of an airplane part from the design as first drawn until its installation in the plane, with special emphasis on the tools and machinery used. 2 reels, 16 mm., silent.

Aircraft Welding—Portraying the use of oxygen acetylene welding in airplane manufacturing, describing technic, tools and the manner in which student mechanics learn how to perform skillful work. 2 reels, 16 mm., silent. The

BEGIN *RIGHT*—WITH THE SPECIFICATIONS!

The year 1941 will see great expansion in school construction. Holtzer-Cabot standardized signaling equipment will play a vital part in bringing new projects to the height of efficiency, and in improving schools already built. School administrators throughout the country know that when they "standardize with Holtzer-Cabot standards," schools are equipped with the best. Holtzer-Cabot Signaling Systems are the result of more than six decades' cumulative experience and leadership in this highly specialized field. Write for literature describing Holtzer-Cabot school equipment.

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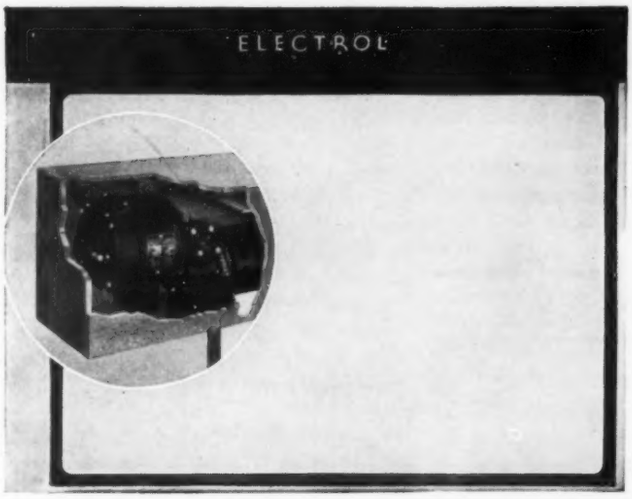

Down through the years, Da-Lite has continually pioneered improvements in screen surfaces and mountings that make for still brighter pictures and easier projection. Above is shown the electrically operated *Da-Lite Electrol.* Its automatic operation simplifies projection in large class rooms and auditoriums. It is available with Da-Lite Glass-Beaded or Mat White surface in sizes up to 20 by 20 feet.

THE DA-LITE CHALLENGER

The portability of the Da-Lite Challenger reduces the number of hanging screens required. It can be set up anywhere in 15 seconds. It is the only screen to have *square* tubing in the center rod of the tripod and the extension support. 12 sizes from 30" x 40" to 70" x 94" inclusive.

The Da-Lite line includes surfaces, sizes, and mountings to meet every requirement. All models are fully described in the 48 page Da-Lite catalog. Ask your supplier for a copy or write direct.

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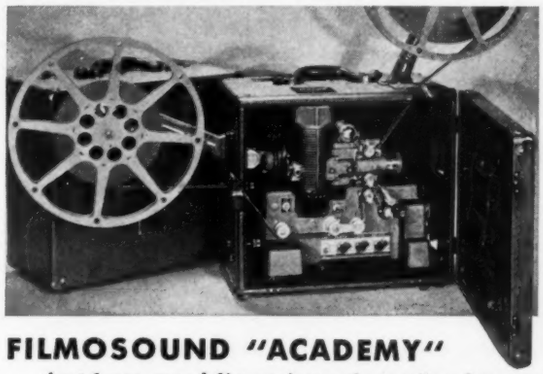
GET THESE
FREE BOOKS
REVIEWING FILMS FOR EDUCATION, FOR RECREATION

● Just off the press are these two new catalogues of 16 mm. sound and silent films for school use. They include hundreds of recent additions to the Bell & Howell Film Library, as well as previously catalogued films. And they are easier to use; first, because educational and recreational films are presented in separate books and, second, because educational films are now arranged by curricular divisions of subject matter. Free to school owners of 16 mm. projectors, 25c each to others. Send the coupon now.



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. . . the 16 mm. sound film projector that's tailored to meet school needs . . . that's been proved in the service of thousands of schools. It projects both sound and silent film and offers a wide range of audience-handling capacity, instant lens interchangeability, and provisions for using microphone and phonograph turntable. Exclusive Safe-lock Sprockets make incorrect film threading impossible. Complete film protection, too, is afforded by these sprockets and by the new B&H Constant-tension Take-up. Long life and lasting dependability—as important to cost as purchase price—are assured by correct design, B&H metered lubrication, and by precision construction by the engineers who for 33 years have built Hollywood's preferred professional equipment. Price, $298.

A B&H Visual Education Specialist Is Near You

B&H Visual Education Specialists, distributed as mapped, are fully informed, capable, ready to help you solve any school motion picture problem both before and after purchase. This staff is but one expression of Bell & Howell's complete service to schools, which also includes renting and selling films and supplying cameras and accessories as well as projectors.

Use coupon for specialist's service; for information.

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ADVERTISING PAGES REMOVED

foregoing are the first two films in a series on aviation mechanics being released by Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York City. The films were made with the cooperation of the Roosevelt Aviation School on Long Island.

Safety in the Home—Presents graphically the rate and annual toll of home accident injuries. Attention is focused on the commonest sources of accidents in and about a typical home and suggestions are given for their elimination. The garage, basement, inside stairways, kitchen, living room, bedroom and bathroom are visited to detect hidden dangers in the interests of a home safety campaign. Produced in collaboration with George P. Silverwood, director of safety, public schools of Green Bay, Wis. Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

Airwaves and **Television**—Two one reel films sponsord by RCA Manufacturing Company, Camden, N. J., that tell the story of the development of these two mediums. The principal distribution agency, which supplies the film for the cost of transportation alone, is the William J. Ganz Company, 19 East Forty-Seventh Street, New York City.

Buenos Dias, Carmelita—An exercise in intermediate Spanish, this film tells the story of pretty Carmelita and her fellow students. The vocabulary, which emphasizes the numbers and the clock phrases, consists of 150 words of the Kenniston merit lists. It will be easily understood by second year students. The film was planned and its production supervised by Harold Croghan, chairman of the language department at Sullivan High School, Chicago. Mr. Croghan also prepared the teacher's guide and the preparatory lesson. Fifty copies of the lesson accompany each print. The purchase price is $50 and the one day rental price is $3; for each additional day there is a 50 per cent discount. The running time is 17 minutes. 16 mm. soundfilm. C. O. Baptista Films, 325 West Huron Street, Chicago.

NAMES IN NEWS

Superintendents

HENRY H. HILL, superintendent at Lexington, Ky., has been appointed assistant superintendent of instruction of the St. Louis public schools. Mr. Hill will be in charge of general administration, having charge of the hygiene and attendance divisions and supervision of office work, records, personnel and pupil guidance. He will receive a salary of $7250, starting January 1.

THEODORE J. JENSON, superintendent at Delavan, Wis., recently was appointed superintendent at Fond du Lac, Wis., succeeding L. P. GOODRICH, who is going to Milwaukee as an assistant superintendent.

WALTER S. BOARDMAN has succeeded S. TAYLOR JOHNSON as superintendent at Oceanside, N. Y. Mr. Boardman had been principal of the high school.

SOLOMON L. SWINGLE has been named superintendent at Roseville, Ohio, to succeed W. W. WILSON, who resigned to accept a similar position at Millersburg, Ohio.

ALDEN T. STUART, for the last seven years principal at Canaseraga, N. Y., has been appointed superintendent at Perry, N. Y., succeeding RAYMOND D. RICHARDSON.

FRANK C. RANSDELL, county superintendent of Hardin County, Ohio, for eight years, has been reemployed for a three year term by the board of education.

CHAUNCEY M. OGDEN has been advanced from the principalship to the superintendency at Woodmere, N. Y., succeeding PAGE E. COLE, who has retired.

DONALD P. MATTOON, superintendent of schools at Carver, Lakeville and

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SHINE-ALL is a neutral liquid cleanser, contains no abrasives, ammonia, lye or caustics, and cleans finished woodwork, porcelain, painted and enameled surfaces, as well as all types of flooring, without fear of injury.

Traffic is never allowed to touch the floor. A beautiful, new, protective SHINE-ALL sheen is placed on the floor at every cleaning.

There is a Hillyard Maintenance Engineer near you. His advice is FREE. Write today.

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Rochester, Mass., since 1938, has resigned to become superintendent of the Tilton-Northfield School Union in New Hampshire. GEORGE R. AUSTIN, principal of the new junior-senior high school, Dighton, Mass., has been named to succeed Mr. Mattoon.

EDGAR R. SCHRIBER has been elected to succeed ALFRED M. CORTWRIGHT as superintendent of the third supervisory district, Orange County, New York.

DR. HAROLD G. CAMPBELL, superintendent of New York City schools, has announced the temporary assignment of FREDERIC ERNST, associate superintendent, to take charge of the division of vocational schools to succeed DR. WILLIAM E. GRADY, who died November 6. Mr. Ernst also will continue as director of the high school division, his regular post.

JOHN W. RISCH, principal and coach at Midway High School, Sedalia, Ohio, has been named superintendent of Pike township schools at Rosedale, Ohio, succeeding E. C. CARPENTER, who has accepted active duty in the Army.

CATHERINE I. RHODES, a teacher in the A. B. Davis High School, Mount Vernon, N. Y., has been appointed assistant superintendent of Mount Vernon schools.

HAROLD A. COOK has been appointed superintendent of schools to direct North Sacramento, Hagginwood, American River, Gardenland and Ben Ali schools in California. He has been acting as assistant superintendent following twelve years as principal of the Hagginwood School. He succeeds MRS. MAUD FITHIAN, who has taken leave of absence and is now working in the county superintendent's office.

MERLE R. SUMPTION, who recently received the Ph.D. degree from Ohio State University, has been appointed assistant in the division of tests and measurements of the St. Louis board of education.

WILLARD T. JONES, superintendent at Ballston Spa, N. Y., has resumed charge of the schools after completing resident studies for the Ph.D. degree at Columbia University. During his absence the schools have been under the supervision of JOSEPH E. WERNER, junior high school principal.

Foss ELWYN, high school principal at Sault Sainte Marie, Mich., for the last fourteen years, has been appointed superintendent of schools at Sault Sainte Marie to fill the unexpired term of the late GEORGE G. MALCOLM.

Principals

CHARLES J. PICKETT, principal of Samuel Gompers Vocational High School, Bronx, New York City, has retired voluntarily, thus ending his departmental trial on charges of employing 19 substitute teachers without having classes for them to teach. JAMES MARSHALL, president of the New York City board of education, said the charges are neither dismissed nor withdrawn but will not be pressed because of the retirement. Mr. Pickett, who has been in the school system more than forty years, will receive about $5000 annual pension.

WILLIAM H. FLAHARTY, Scotch Plains, N. J., has been chosen as the new high school principal at Pompton Lakes, N. J.

JOHN E. KLINGMAN, former supervising principal at Alden, Pa., has been made principal of Northumberland Senior High School, Northumberland, Pa. He left a New York publishing house to accept the Northumberland post.

B. H. VANDENBELT, former superintendent at Bad Axe, Mich., has been appointed principal of Lincoln Consolidated Rural School, affiliated with Michigan State Normal College at Ypsilanti, Mich. For some time Mr. VandenBelt has been principal of Theodore Roosevelt Training School which also is affiliated with the college. He succeeds HENRY A. TAPE, who was recently appointed president of the Northern State Teachers College at Marquette, Mich.

STANLEY RHOADS YARNALL, after forty-two years' service with the Germantown Friends' School, Germantown, Pa., the last thirty-three as its principal, is con

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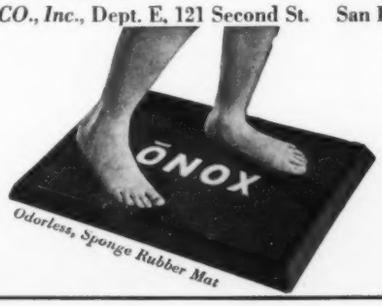

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The greatest improvement in Mat construction in 50 years . . . Medart Gym Mats with Fobafimi Sisal Filler Pad are clean, sanitary, and easy to keep that way . . . Heavy duty construction throughout . . . Next time, insist on Medart Fobafimi Sisal Mats for a new experience in resiliency . . . Write for complete details concerning this radically new and improved mat.

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templating retirement. He will be 70 years of age next August.

CHRISTIAN T. ANDERSEN has been appointed as assistant secretary of the Detroit board of education, replacing LESTER H. RICH, deceased. Mr. Andersen has been associated with the Detroit school system since 1927 in research work, and his position prior to his promotion was assistant director of educational expenditures.

In the Colleges

ROY A. SEATON, dean of the division of engineering, Kansas State College, has been appointed director of the engineering defense training program in the division of higher education of the U. S. Office of Education.

DR. JOHN ROOD CUNNINGHAM, president of the Louisville Presbyterian Theological Seminary, Louisville, Ky., from 1930 to 1936, has been named president of Davidson College, Davidson, N. C. He succeeds DR. WALTER L. LINGLE.

DR. GEORGE THOMAS, president of the University of Utah since 1921, has notified the board of regents that he would like to retire on June 30. Doctor Thomas is 74 years old.

DR. EDWARD W. ENGEL, faculty member of American University, Washington, D. C., since 1928, has been elected acting president of the university. The position as head of the university has been vacant since the resignation of CHANCELLOR JOSEPH M. GRAY last summer. A committee chosen by the board of trustees has been administrating the university.

DR. JOHN P. MILLIGAN has been appointed dean of instruction at Jersey City State Teachers College, Jersey City, N. J. Doctor Milligan formerly was assistant professor of education at Newark State Teachers College.

DR. LYMAN E. JACKSON of Ohio State University has been elected president of South Dakota State College, Brookings, S. D. Doctor Jackson was junior dean in the college of agriculture at Ohio State.

Deaths

JOHN F. THOMAS, deputy superintendent of the Detroit public schools and president of the Michigan Education Association, died recently as a result of injuries received in an automobile accident. He was 66 years old and had been associated with the Detroit schools for thirty-two years.

HERBERT L. RAND, 69, principal of the Pickering School at Salem, Mass., since 1912, died suddenly at Salem Hospital.

WILLARD ALLING, principal of the Allendale public schools, Allendale, N. J., for thirty-three years, died recently at the age of 61 years. He had been confined to his bed for a month suffering from a heart condition.

SAMUEL A. THOMPSON, 33, principal of Corrinna Union Academy, Guilford, Me., died recently from a rifle bullet wound obtained in a hunting accident.

DR. ARTHUR E. BROWN, headmaster of Harrisburg Academy, Harrisburg, Pa., for twenty-eight years until his retirement because of illness, died November 27.

J. F. MORAN, 66, principal of the Garfield School, Yakima, Wash., died suddenly of heart attack.

LEWIS M. KEIM, principal of the Philadelphia Evening High School, died recently at the age of 67.

MOTHER M. JOSEPHA, president of Marywood College, Scranton, Pa., died at the college after an illness of one week.

EMMA B. HIELD, teacher and vice principal at Tustin Union High School, Tustin, Calif., since 1922, has been selected to fill the post of principal made vacant through the death of J. W. MEANS.

FREDERICK WINSOR of Brookline, Mass., for thirty-seven years headmaster of Middlesex School, Concord, Mass., which he helped found, died recently in Boston. He was 68 years old. He was a frequent contributor to the *Atlantic Monthly* and was the author of "The Art of Human Behavior."

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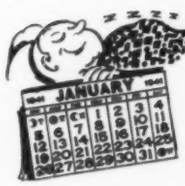

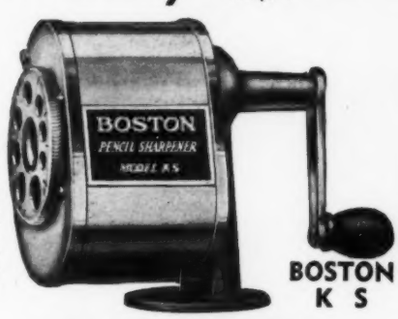

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The Bookshelf

General

LEARNING THE WAYS OF DEMOCRACY. *A Case Book of Civic Education. By the Educational Policies Commission. Washington, D. C.: National Education Association,* 1940. *Pp.* 486.

CURRICULUM DEVELOPMENT IN CITY SCHOOL SYSTEMS. *By Douglas E. Lawson. Chicago. University of Chicago Press,* 1940. *Pp.* xiii+238. $2 *(Paper Cover).*

SCHOOLMASTER OF YESTERDAY. *A Three Generation Story. By Millard Fillmore Kennedy and Alvin F. Harlow. New York: Whittlesey House,* 1940. *Pp.* viii+359. $2.75.

GOVERNMENT AND ECONOMIC LIFE. *Development and Current Issues of American Public Policy.* Vol. II. *By Leverett S. Lyon, Victor Abramson and Associates. Washington: Brookings Institution,* 1940. *Pp.* 780. $3.50.

BLACK FIRE. *A Story of Henri Christophe. By Covelle Newcomb. New York: Longmans, Green and Company,* 1940. *Pp.* xii+275. $2.50.

WAR PROPAGANDA AND THE UNITED STATES. *By Harold Lavine and James Wechsler. Published for the Institute for Propaganda Analysis. New Haven: Yale University Press,* 1940. *Pp.* x+355. *Illustrated.*

GENIUS IN THE MAKING. *By Herbert A. Carroll. New York: McGraw-Hill Book Company,* 1940. *Pp.* xi+307. $2.75.

OKLAHOMA'S DEFICIT. *A Study in Financial Administration. By Findley Weaver. Norman, Okla.: University of Oklahoma Press,* 1940. *Pp.* viii+67.

AN EDUCATIONAL PROGRAM FOR THE YOUTH OF NEW YORK STATE. *Report Prepared by the Committee on Youth Needs. Albany, N. Y.: New York State Teachers Association,* 1940. *Pp.* 24. *(Paper Cover.)*

Textual

THE EDUCATION OF EXCEPTIONAL CHILDREN. *Its Challenge to Teachers, Parents and Laymen. By Arch O. Heck. New York: McGraw-Hill Book Company, Inc.,* 1940. *Pp.* xv+536. $3.75.

THE NEW BASIC READERS: CURRICULUM FOUNDATION SERIES. *By William S. Gray and Others. Before We Read. Pp.* 48. $0.32. *We Look and See. Pp.* 48. $0.24. *We Work and Play. Pp.* 64. $0.24. *We Come and Go. Pp.* 72. $0.28. *Fun With Dick and Jane. Pp.* 160, $0.64. *Our New Friends. Pp.* 192. $0.76. *Think-And-Do Books. Pp.* 70 *each.* $0.28 *each. Chicago: Scott, Foresman and Company,* 1940.

NEW WORLD OF CHEMISTRY. *By Bernard Jaffe. New York: Silver Burdett Company,* 1940. *Pp.* xi+692. $1.84.

A STUDY OF CRITICAL READING COMPREHENSION IN THE INTERMEDIATE GRADES. *By Roma Gans. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* vi+135. $1.85.

FEEDING OUR TEETH. *A Nutrition Unit for the Third and Fourth Grades of the Elementary School. By Mary S. Rose and Bertlyn Bosley. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* 26. $0.30 *(Paper Cover).*

THE CHILD AND THINGS. *By Edwina Fallis. Pp.* vi+184. *Yonkers-on-Hudson, New York: World Book Company,* 1940. $1.68.

IMPROVEMENT OF BASIC READING ABILITIES. *By Donald D. Durrell. Yonkers-on-Hudson, New York: World Book Company,* 1940. *Pp.* viii+407. $2.20.

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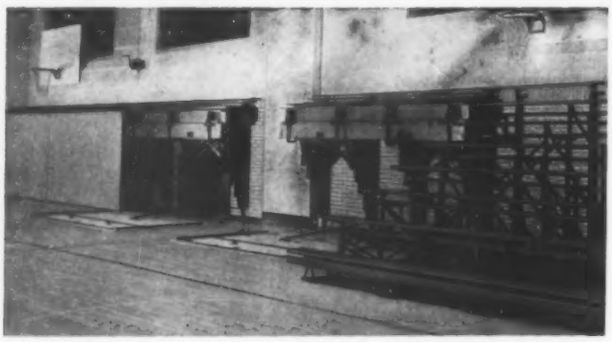

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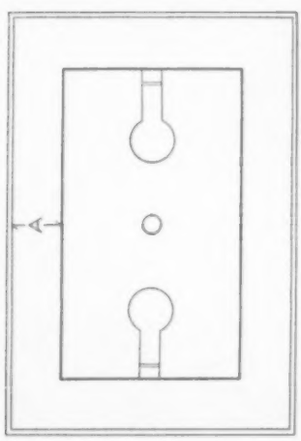

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Trade News

Certified Products

The question of toxic ingredients in color materials and chalks has attracted the attention of the public and a demand for noninjurious colors is becoming more and more insistent.

While stating that it knows of no case of injurious effects resulting from the use of color materials produced by the water color and crayon industry, the Crayon, Water Color and Craft Institute, Inc., of New York City, recognizing the importance of eliminating any possible danger, has announced the employment of Dr. F. B. Flinn, associate professor of industrial hygiene at Columbia University, to analyze the products of crayon and water color companies desiring this service.

The result has been the adoption of a complete line of noninjurious materials by those houses submitting their products for analysis. As soon as a formula meets with Doctor Flinn's approval, the institute issues the right to place a label, owned and controlled by the institute, on such merchandise. To date manufacturers representing more than 80 per cent of the volume of the school merchandise produced by the industry have availed themselves of this service.

Open New Plant at Dallas

John Sexton & Company, manufacturing wholesale grocers of Chicago and Brooklyn, on January 2 opened a distributing plant at Dallas, Tex., to serve institutions and schools in the Southwest. This company controls a large portion of the merchandise it sells annually through the importation of foods from all producing countries of the world. It manufactures a vast assortment of preserves, jellies, mince meat, gelatin dessert powder, salad dressings, pickles and relishes in the Sexton Sunshine Kitchens.

Seamless Metal Roofing

Follansbee Steel Corporation of Pittsburgh has developed a seamless alloy metal roofing that is laid in long strips instead of the customary short sheets. Soldering is eliminated and trimming reduced to a minimum. It comes in 50 and 100 foot rolls. Seamless roofing recently was used on a new public school building at Hooversen Heights, W. Va., to speed up construction work.

New Fixture Cleaner

A new cleaning agent developed for Bradley Washfountains, multi-stall showers and drinking fountains, called Bradex, has been announced by the Bradley Washfountain Company, Milwaukee. Descriptive literature and prices will be supplied upon request.

Doubles Manufacturing Facilities

When the leading manufacturer in a town of 1600 doubles the size of his manufacturing plant, it causes quite a stir. When the F. W. Wakefield Brass Company of Vermilion, Ohio, announced its expansion to its local press, the weekly *Vermilion News* issued a special edition. The addition to the plant is needed to handle rapidly expanding business in fluorescent lighting units. "Fifty-five per cent of our business this year has been in fluorescent units, as against 3 per cent last year," A. F. Wakefield, president of the company, told the *News*.

Brings Out New Fluorescent Lamps

With the demand for fluorescent lighting spreading to a variety of fields, General Electric's lamp department at Nela Park, Cleveland, has just brought out

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three new fluorescent lamps. One is a 100 watt 60 inch Mazda fluorescent lamp; another is a little 6 watt 9 inch Mazda fluorescent lamp, and the third new unit is a G. E. Mazda Soft-White lamp which may be had in several sizes and lengths.

Prompt Relief From Chewing Gum

What janitor hasn't had to stretch his tired back scraping chewing gum off the floor with a putty knife? For years Chester F. Hayford, Fessenden, N. D., had trouble removing gum and dirt accumulations from schoolhouse floors; then he devised the Hayford Gum Scraper, which can be used on any type of floor without scratching. It can be attached to the push broom or to the portable vacuum sweeper. One stroke is usually sufficient to remove sticky accumulations. This device is being handled by the Flour City Brush Company, Minneapolis, and by Northern School Supply Company, Fargo, N. D., as well as by the inventor.

Skating Pond Spray

Smooth, safe skating rinks may now be quickly and inexpensively formed with a new skating pond spray manufactured by Russell Manufacturing Company, Platteville, Wis. Any vacant lot is suitable as a site. The operator simply sets the machine in position, connects the hose to a convenient hydrant and turns on the water. A series of nozzles shoots out a thin spray, which freezes as it hits the ground. The machine is moved back and forth over the area until about 1 inch of ice is built up. Satisfactory ponds have been made at a temperature as high as 25 degrees above zero.

Improved Safety Ladder Shoes

Designed for indoor and outdoor use, the new Dayton Universal Safety Ladder Shoes fit any size ladder rails and can be installed quickly by anyone. Simply drill three holes, insert the bolts, draw up the nuts and the ladder is ready for use and cannot slip, creep or skid. By merely slipping the shoe into a horizontal position, a tempered serated steel plate prevents slipping wherever a spike grip is necessary. Dayton Universal Safety Ladder Shoes are made by the Dayton Safety Ladder Company of Cincinnati.

New Mechanical Instructor

Greater accuracy in shorter time, with less conscious effort on the part of the student because of improved coordination of eyes, brain and fingers, is claimed for the latest mechanical adjunct to teaching typewriter operation and shorthand transcription. The device is the Trans-Lux Visualizer, an adaptation of the machine used by stock brokers; instead of a teletype tape, a typing or shorthand lesson is projected on the screen. The lesson appears two lines at a time and moves upward, out of sight, at a speed determined by the instructor. The screen on which the lesson appears is about 6½ feet from the floor. With the lesson constantly disappearing from view, eyes must be kept on the screen at all times. Remedial reading is indicated as another field for the visualizer. The manufacturer has offices at 775 Main Street, Buffalo, N. Y.

Skylight Roller Shade

Luther O. Draper Shade Company, Spiceland, Ind., has introduced a complete roller shade unit adaptable to ceiling window openings. An inverted L-shape steel shield, which is attached to the ceiling, contains the brackets for the shade roller and also special curved brackets; the latter hold one end of parallel wires that are tightened by a turnbuckle close to the ceiling line. Crosswise steel stays are inserted in cloth pockets to stiffen the cloth into a flat surface that will roll up completely by use of an extra strong spring roller. This roller shade is removable from its brackets without disturbing the wire fastenings. The pull cord is directed by one or more pulleys.

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Side Glances—

NOT to be caught napping, our Chalk Dust columnist (see page 54) wrote a Valentine to the five A.A.S.A. presidential nominees. Extra-sensory perception or perhaps just loyalty to old New York State made him exalt Superintendent Pillsbury as the climax for his romantic rhyming.

The balloters also chose William Howard Pillsbury of Schenectady as their heart's choice. He will take office on March 15.

President-Elect Pillsbury was born in Massachusetts, attended Carleton College and the universities of Chicago and Minnesota, taught in rural schools and, from 1918 to 1927, was deputy superintendent of schools at Buffalo. He has taught summers in colleges and universities and has been active in state organization work.

THE March issue will exude convention from cover to cover —big name speeches ("boiled down to brass tacks," to quote a vivid mixed metaphor); a spot news report, presented in Portfolio form, and a generous showing of informal pictures. Our readers did not care much for last year's studio portraits of the Famous and Familiar and, frankly, the editors felt dissatisfied with that part of the job. So it is back to the Boardwalk snapshots unless the weather be too foul for cameras.

SANDWICHED in between the convention outpourings will be an unusual architectural article, M. M. Chambers' carefully prepared analysis of the law, facts on school feeding and some practical tips for department heads.

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BETTER PLANT PRACTICES

Window Breakage

Window breakage in schools throughout the country runs into good round figures. It cost $20,000 for materials alone in New York City last year for the more than 125,000 panes of glass broken. Other communities report figures averaging all the way from $32 to $1000.

In discussing the problem with certain school business officials, numerous suggestions are advanced, especially closer cooperation of principals and teachers in studying the situation. This may involve a change in the location of play areas or in the types of games played. The application of mesh guards to windows in dangerous spots may help, or the adoption of some code by the student body.

The Pupil Pays

In Union Free School District No. 1, Town of Tonawanda, Kenmore, N. Y., Kenneth O. Irwin, district clerk and business manager, advocates making the pupils pay. "Whenever a pupil maliciously breaks a pane of window glass in a cabinet or interior door," he says, "we collect from that pupil the amount of money necessary to replace the broken glass. If you will do this three or four times a year, that is, make pupils pay for the replacing of this glass, you will find that breakage will decrease considerably.

"We also follow this procedure in the malicious mutilation of instructional equipment and furniture. Any pupil caught defacing a piece of furniture pays for its restitution. It is true there have been times when parents of pupils have objected to the payment but we refer them to our legal staff, which has in extreme cases been fairly successful in making collections."

Incidentally, the total amount of money spent for replacing broken window glass in Kenmore, N. Y., during the school year was $32, and this covered material and labor.

It Pays to Screen Windows

Screening windows near playground areas has reduced window breakage in Long Branch, N. J., according to Harold N. West, secretary and business manager. In this community, it costs the board of education approximately $350 yearly to replace broken window glass.

"After carefully studying the situation," Mr. West tells us, "it appeared that about 20 per cent of the breakage was due to the proximity of play areas and the other 80 per cent, to willful negligence on the part of the small boys who throw stones, use air rifles or 'sling shots.'

"We have screened a great many of the windows near the playground areas and have reduced the breakage somewhat. When boys are caught breaking

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the windows we have demanded that they pay for them, even if it is on the installment plan of 25 cents or less per week. We find this procedure makes them sense the seriousness of damaging property. We have tried to impress upon them that it is not the city's or board of education's money but that the money used to replace the windows comes from their own parents who have to pay taxes, indirectly, for this purpose.

"Teachers have instructed their pupils to take pride in their building and in all cases not to damage the property; in this way, too, the breakage has been reduced. I might say that the city has also set up certain sections for playgrounds for the boys and girls, and the board has issued instructions that they are not to play ball close to the school building."

Watch Window Poles

Careless use of window poles is one cause of window breakage in the schools of New Rochelle, N. Y., in which glass replacement costs about $600 yearly. W. J. Smith, supervisor of buildings and grounds, enumerates, among common causes, the closing of building windows with a bang, proximity of play areas to school buildings, the playing of baseball on small areas, an easy way to get even with teachers and principals and just the urge to throw something at the windows.

"Windows have been screened wherever practical," he says, "to save unnecessary breakage and on certain exit doors plain glass has been replaced with wire glass and safety type glass has been installed in main entrance doors.

"School principals have been asked to instruct teachers in charge of playground activities to conduct games, involving the throwing or batting of balls, as far from the building as possible. The Municipal Bureau of Recreation, which also uses school playgrounds after regular school hours, has been asked for cooperation.

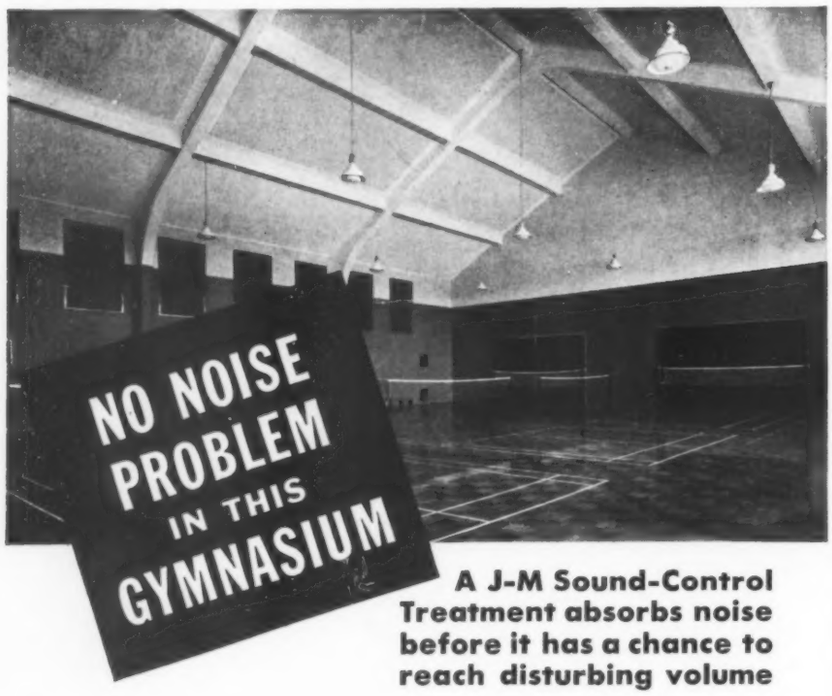
"The playing of softball on small playgrounds, especially after regular school hours under the Municipal Bureau of Recreation, has, during the last two years, raised a problem of control, because of the fact that the manufacturers of soft balls have been gradually making them more lively. This means that a well-hit ball will travel almost as far as a regular baseball. Ways and means of cutting down on the liveliness of this ball have been discussed with the physical education department of the schools, the Municipal Bureau of Recreation and manufacturers of the balls.

"When the action of breaking window glass is deliberate, every effort is made to find the guilty person or persons and payment for replacing such broken window glass is demanded. In the majority of cases the board of education is reimbursed for such damage but there are times when it is necessary to call in the police department and to work through the children's court in order to obtain reimbursement.

"Usually, the information gained as to the name or names of the person or persons guilty of deliberately breaking the windows is obtained by the school principal through the cooperation of the pupils.

"Our main difficulty is the protection of the various buildings over week ends, holidays and nights, when the largest percentage of glass is broken. A system of automobile patrol, during the spring, summer and fall, has been tried out for week ends and holidays with some success, but what to do after dark is a problem yet unsolved. The automobile patrol idea was developed to keep the school grounds clear over week ends and holidays. We found that it helped as far as window breakage was concerned but it did not stop this nuisance entirely, as the patrol had to cover 15 school locations in the city.

"We endeavor to work up a sense of pride in the pupils for their buildings and grounds. This pride in buildings and grounds can be established only through the cooperation of the teachers and principals."



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LOOKING FORWARD

Parent Education

THE influence of the power age already has made itself felt in many aspects of living. The family and the home are in a stage of transition from one bio-economic aspect to another; communities are rapidly losing population to adjacent suburbs where land is not considered so valuable, and there is more breathing space for children.

The technician in public service—teacher, social worker and political executive—sees these changes and offers remedies. The sociologist, as well as the educator, too frequently analyzes the transition in family life from one age to another as disintegration instead of looking upon it more broadly as a slow change from one form of social organization to another.

Since these family changes are diagnosed as failure when appraised subjectively in terms of a conventionalized attitude, some educators as well as laymen offer the comparatively simple remedy of extension downward of institutional control over lower age groups, despite the fact that there is as yet little evidence that the institution does a better or as good a job as the home. The school as an extension and supplementation of the home in early infancy has extensive but as yet unexplored possibilities. The school as a practical substitute for the home is a most dubious venture. This statement should not be construed as an argument against the various experimental centers for infant education.

Little attention has as yet been paid to the actual conditions prevailing in the primary social unit. Change from one practice to another is only failure to the closed mind and to the traditionalist. The fact is that both men and women enjoy today a higher level of education than they have in any preceding generation.

The development of a more dynamic secondary and advanced curriculum for women in relation to their chief responsibility—building a home and rearing children—is beginning to show productive results. Formalized adult and informal noninstitutional programs offer training to prospective and actual parents. The further extension of these courses for parents is highly desirable.

The home in transition offers one of the finest fields in social and educational experimentation. The problem should not be thrown off lightly by offering institutionalization as a substitute for an intelligent primary democratic unit for group living. The school might well devote some of its energies on both the youth and adult levels in attempting to produce a new competency in the home and in improving the participative relations between home and school.

Saluting the Flag

DURING the last four years conflicts have arisen in several states between "Jehovah's Witnesses," a primitive religious sect, and the public schools. Controversy has arisen over the daily pledge of allegiance to country and flag. The objection of members of this sect is not to the pledge of allegiance but to saluting the flag, which their religious tenets classify as "a graven image" and, therefore, incompatible with literal biblical interpretation.

Institutional practice has been to suspend or expel the children from school and, in some instances, to bring suit against the parents. The conflict between Jehovah's Witnesses and the schools has raised many interesting legal questions. The supreme court of New Jersey upheld the state in 1937, contending that saluting the flag was a patriotic exercise and mandatory for all. Courts in Massachusetts and Georgia also have upheld the boards of education, declaring that the requirement did not interfere with religious freedom.

The Supreme Court of the United States also rejected two appeals from lower courts in similar cases, which caused the federal district court in Massachusetts in 1939 to rule that regulations regarding salutes to the flag were not considered to be infringements on religious liberty.

On the other side, a California court ruled that the right of the child to attend school is a vested right and that refusal to salute the flag was no justification for suspension. The United States circuit court of appeals in Pennsylvania held in 1939 that school children need not salute the flag if the action was counter to their religious convictions.

In Detroit, Pontiac and Rochester, Michigan, similar difficulties have been encountered and the schools have expelled the children for refusing what to them was "an act of idolatry." When the problem in the Rochester case was presented to Judge Arthur E. Moore of

Oakland County, Michigan, he sensibly suggested that the individuals take an oath of allegiance to the United States as evidence of their loyalty and be excused from the daily salute to the flag since this action was contrary to their religious convictions.

Such a solution seems both wise and adequate. Jehovah's Witnesses are loyal American citizens. Their technical scruples against oaths and images, peculiar as they may be to those who believe otherwise, are honest and, therefore, to be respected. The democratic state must avoid interference with freedom of conscience. True patriotism grows out of an inner conviction or belief which, in turn, stems from knowledge and appreciation of democratic processes. The best work that the school can do in these cases is to keep the youngsters of this sect in attendance and, instead of creating and widening a religious conflict, help them to grow in true patriotism, which is both of the heart and of the mind.

Advertising—I

IN THE elemental cultures simple trading activities are carried on by means of a crude daily or weekly market. Each individual who has something of his own to offer in exchange for an article of food, clothing or a tool made by others brings his "truck" to the conventional meeting place and squats silently until someone offers to trade. The possibility of his attracting customers is determined by the appeal of his wares to others.

The next stage in primitive exchange is the noisy market place in which the individual vendor is no longer content to depend upon his goods attracting the buyer but moves about shouting the value of his offerings.

In our own specialized and highly complicated economic and social structure, this simple relationship between the producers and the consumers has changed only in degree. The market place has expanded from the village to the nation. To bring the market to the customer requires a different technic. The silent primitive display and the raucous shouting of the aggressive merchant are replaced by an educational technic that includes both visual and oral presentation. This method of making the customer conscious of the market is called advertising. In its truly functional aspect the advertising of commercial and industrial products is an essential process of consumer education differing only in detail and in means of expression from that originally employed.

To the extent that advertising honestly presents the purpose, value, quality and desirability of an article, it is economically productive and serves a valid purpose. Without advertising a national economy would be difficult, if not actually impossible, to maintain. Since truthful advertising increases the market range of any product, it also increases the extent of distribution, permits mass production and, under free competition, results in an actual reduction in the selling price to the specific advantage of the consumer. While there is undoubtedly waste in advertising resulting from poor planning, misconception of market or misjudgment of economic capacity to buy, it is in the main distinctly productive and decidedly educational. The waste in advertising is probably not out of proportion to normal waste in other aspects of living. Even direct institutional education cannot be conceded too high a degree of efficiency.

In addition to acquainting the consumer with his purchasing possibilities and thus expanding his market horizon above the limitations of primitive trading, advertising in the United States may be generally credited as educationally stimulating by enlarging the horizon of choice and creating finer tastes and standards in living. Careful analysis of the collateral values accruing from national advertising must result in giving much credit for increases in scope, as well as in taste, of the standard of living.

With all of its obvious weaknesses, the American system has produced larger economic returns to the individual than any other procedure and has created the highest standard of living in the world. At least one third of the Americans today enjoy living comforts that were not even available to the glamorous kings of history and romance. As we advance in intelligence and skill, these advantages will be gradually extended until they include practically all the people. This condition has been made possible through high economic specialization in production, the substitution of machine for slave power and, also, by advertising, which acts as the shuttle in weaving the economic carpet.

Advertising, like other normal educational effort, carries with it no compulsion to buy. It merely presents as attractively as possible the products available for individual consumption. The customer is master of his economic choices. Dishonest advertising may attain an initial success but it falls of its own weight if the product fails to live up to consumer expectations. Reliable manufacturers of economic goods have long since learned that the greatest success accrues to them when they tell the truth about their goods and when the terminal result of their promotional efforts produces a satisfied customer, who automatically returns for more of the product.

Since so large a proportion of advertising is presented through newspapers and magazines, the customer is also protected against misrepresentation by the high standards set by reliable and conscientious publishers. The publisher who expects to remain in business over a long period has a dual responsibility to his subscribers not only to offer reliable textual material but also to ensure the readers of the validity of this advertising.

The Editor

This Bill Is Dangerous

ARTHUR B. MOEHLMAN

EVERY national emergency brings shortcomings in our community and national life into sharp relief. Sometimes these deficiencies have been noticeable for many years and well publicized by special interest groups. Just as soon as a sufficient emergency emotion crystallizes, these interest groups quickly become pressure groups in an effort to achieve their organizational objectives.

It is not difficult to wrap any cause in the flag and to create an attitude whereby criticism or suggestions may be classified as "noncooperative" or "unpatriotic." Public education is not free from these dangers. In actual fact, organized groups of educators have taken advantage of all great emergencies in national history.

Passed as War Measure

Demands for agricultural, engineering and scientific education were promulgated as early as 1838. The strength of the classical tradition in the universities prevented quick action. Instead of trying to reeducate the classicists, professional proponents of these desirable forms of education turned to the federal government in 1846. After several unsuccessful attempts, the first Morrill Act was introduced into Congress in the midst of the war between the states. It cleverly added military training to agricultural and engineering education, thus making it a "war emergency" measure. President Abraham Lincoln signed the Morrill Act in 1862. The first schools were not opened until 1874!

Prior to the World War, a group of vocationalists tried to introduce vocational education into the secondary schools. They met with considerable opposition from academic secondary school principals. Instead of attempting to educate the communities, this small group turned to Congress for federal support. The Davis Bill (1907) and the Page Bill (1912) sought to establish independent federal vocational schools. Congress refused but did provide for a study of the problem.

These vocationalists were smart strategists. They cleverly used the drift to war to emotionalize their program as a defense measure. President Woodrow Wilson signed the Smith-Hughes Act early in 1917. Twenty years later, despite this federal stimulation, not more than 15 per cent of the total need for vocational education had been satisfied!

The current emergency growing out of the present European War already has been capitalized upon by existing groups. The technic is the same. There is a plausible educational deficiency which can be remedied only by immediate congressional action and federal support! Appropriations are made and slowly the work gets under way. After the emergency has passed, the states will find that bureaucratic control from Washington over their community programs has been heavily increased. Emergency extensions of Smith-Hughes and National Youth Administration appropriations (1940) have already been made without too critical examination of plans and programs.

The latest seekers for prestige and appropriations include the American Association for Health, Physical Education and Recreation and the American Camping Association. The physical educators and campers started their agitation for federal support some years back. They drew up their bill in August 1940. It was offered to the House of Representatives by Congressman Pius L. Schwert of Buffalo on October 3.

It is an interesting bill in many ways. First, it provides $100,000,000 annually by 1945, to be divided evenly between physical education and camping, with the states required to furnish only 25 cents matching. Second, it proposes that "this act shall be so construed as to maintain local and state initiative and responsibility in the conduct of education and to reserve explicitly to the states and their local subdivisions the administration of school programs — *insofar* (italics ours) as consistent with the purposes for which funds are made available under this act."

Third, it includes under the head of health and physical education "adequate daily instructional and laboratory periods for all pupils to develop physical fitness; safety habits and skills; activity knowledge, habits and skills; *desirable social behavior and democratic ideals*" (italics ours).

The bill has some other peculiarities but this initial examination of its content may be summarized in the words of a prominent Washington official as "a bill to require every man, woman and child in the United States to goose step to federal tom-toms." Its backers propose to rush it through Congress as a "national defense measure." Members of the physical education group already have been "voluntarily" assessed $10 each to furnish funds to "promote its passage."

A Step Toward Federal Control

This is one of the most dangerous bills yet submitted for federal aid to public education. It parallels Office of Education control of vocational education at the other end of the curriculum. Its enactment means another step toward growing federal control of instructional programs. It is not truly an "emergency" or "national defense" measure. Health and physical education programs have been in operation in public schools for twenty years. If they have not shown results, let the physical educators search for the reason. The Schwert Bill would also force a comprehensive camping program.

Interest groups cleverly use every national emergency as a cloak to cover their own specific purposes. Before this current emergency becomes too emotional, let both educator and layman study carefully the total effect of the physical education bill upon community administered instructional programs. The situation demands calm, critical thinking about ultimate results. Let us not be stampeded!

Six Schools With Social Centers

Construction Details

STRUCTURE: Foundations, concrete. Walls, load bearing brick, stone trim. Partitions, clay tile. First and second floors and roof slabs, reenforced concrete. Structural steel framing in auditorium, gymnasium and community room.

ROOF: Tar and gravel, 20 year bonded over 1 inch insulation.

FLASHING: 16 oz. copper.

WINDOWS: Standard commercial steel sash, wood frames and sash.

FLOORS: Classrooms and corridors, asphalt tile. Toilets, mosaic tile. Auditorium aisles, inset linoleum. Gymnasium, maple laid on steel runners and fastened with patented metal clips.

WALLS: Gymnasium and lavatory, glazed brick. Vestibule and foyer, glazed brick and tile, flush wood wainscot and stone. Corridors, metal wainscot 5½ feet high.

CEILINGS: Classrooms, building tile; auditorium, gymnasium and community room, acoustical tile.

HEATING: Low pressure steam vacuum split system with unit ventilators, concealed in a continuous counter below windows in all classrooms. Coal burning automatic stokers. Self-contained boilers, with complete temperature control for all units.

PLUMBING: Drainage, cast iron. Supplies, copper, brass and steel.

ELECTRIC SYSTEM: Classrooms, aluminum indirect reflectors fitted for future room control by electric eye. Twenty foot candle power on all desks; mogul sockets in fixtures extend intensity to a possible 40 foot candles in special rooms requiring greater illumination. Conduit for public address in all classrooms. Program clock and fire alarm systems. Stage, dimmer cabinet borders, foots, stage and house spots, floor and wall pockets.

COLOR SCHEME: Entrance vestibules and lobby walls paneled in tile, flush oak and birch. Ceiling cornices and wall bands, strong coral, Chinese blue and sea green. Asphalt tile floors, alternate light and dark in colors suiting various color schemes. West and north classroom walls, rose and yellow; south and east exposures, sea greens and blues. Ceilings, off-white for light reflecting properties.

EQUIPMENT: Pupils' desks, taupe metal and standard light walnut, brown birch tops. Teachers' desks and chairs, oak matching room finish. Community room in modern building, bleached mahogany furniture; Swedish modern fabrics for window curtains and upholstery.

COSTS: Building and mechanical trades, including all built-in equipment cabinets, trays, corridor lockers, 40.5 cents per cubic foot.

ARCHITECTS: Childs & Smith, Chicago, architects-in-chief; Kruse & Parish, Seth J. Temple, A. H. Ebeling, H. S. Muesse, R. C. Whitaker, associate architects, Davenport, Iowa.

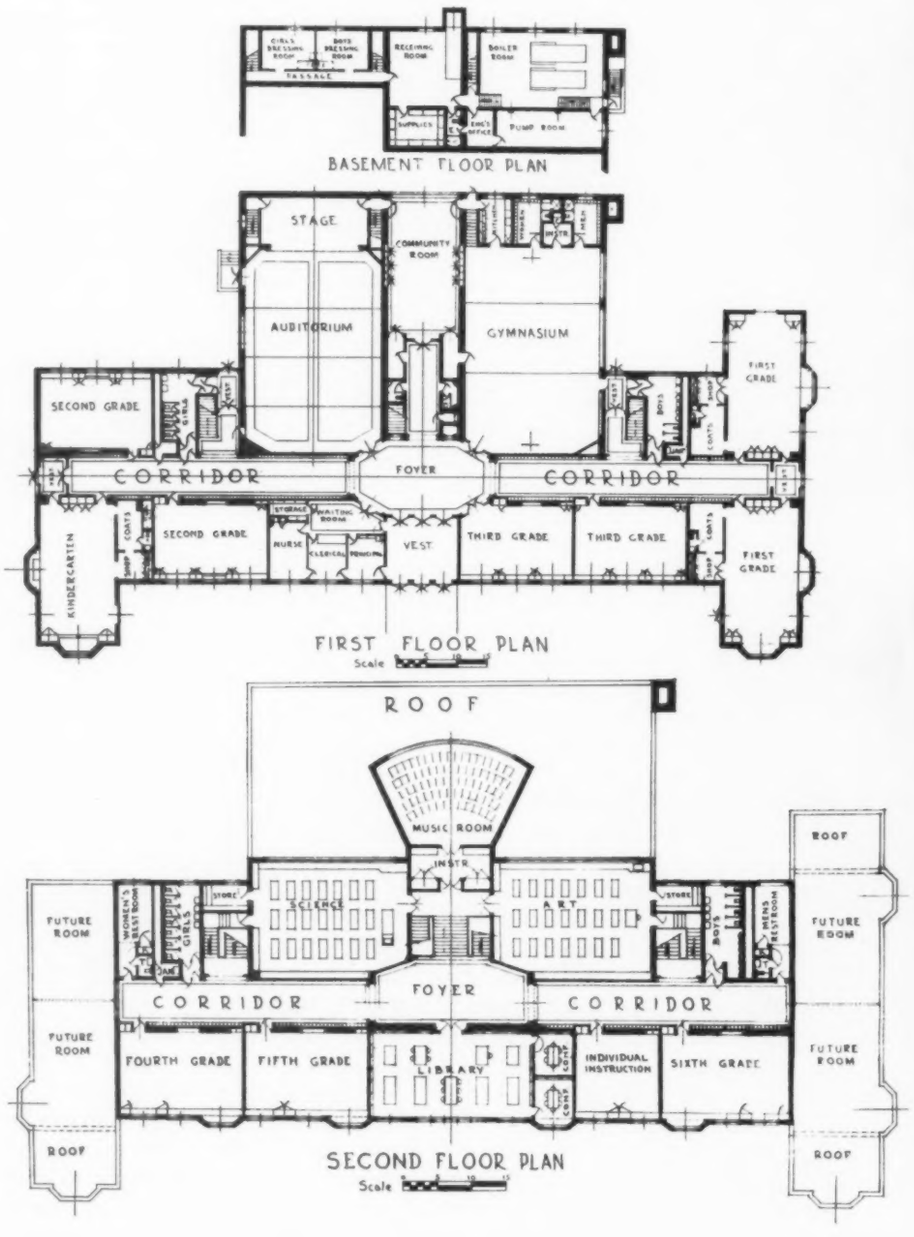
IRVIN H. SCHMITT
Superintendent of Schools, Davenport, Iowa

FRANK A. CHILDS
Architect, Chicago

THIS, in brief, is the story of six new elementary schools in Davenport, Iowa. The imposing project has three angles: (1) these schools are the first step in the rehabilitation of Davenport's entire school system; (2) they have been constructed, happily, without an increase in the tax levy, and (3) in addition to providing the essential features for a modern educational program, each gives the adults in the community the advantages of membership in both a fine athletic club and a civic and cultural center.

Davenport's elementary school plant today comprises 10 buildings in place of the former 17, five of the replaced buildings being located on new sites to provide better distribution of buildings and larger play areas.

A future project for which plans have been drawn consists of remodeling the present high school building and erecting a new fine arts



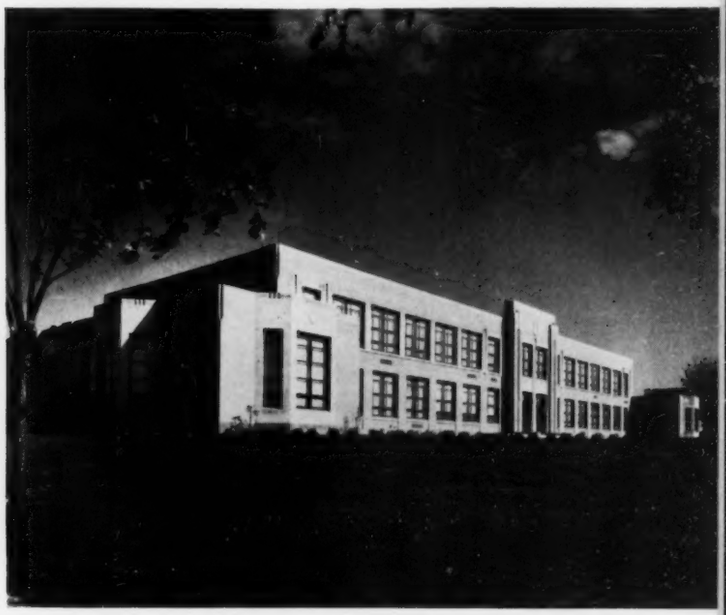
The architecture of Monroe School, Davenport, is severely modern.

Lincoln School is modern but it is modified by a Colonial portico.

McKinley School is a conservative traditional type of architecture.

In Jefferson School a modified collegiate Gothic style was followed.

Madison School is traditional Gothic; the facade is brick and stone.



Washington School reflects the modern trend in its window sash.

A community club and reading room has been provided in each school. The room above, in Monroe School, is paneled in birch and furnished in modern.

building to house the music, art and speech departments. This fine arts building will contain a small practice theater seating 500 and, through subsequent extension, an auditorium seating 3500.

A plant survey made in 1925 showed that 12 elementary school buildings were both a safety and a health hazard and, moreover, were educationally obsolete. Gymnasiums, auditoriums, libraries and special rooms for arts, crafts and music were lacking.

The voters of the district approved the $1,800,000 bond issue for the six new buildings and additions to two elementary schools by a 77 per cent majority following a low pressure campaign. Newspapers and prominent citizens backed the campaign and the P.-T.A. assumed the responsibility of a house-to-house canvass to make sure that every voter was informed. Canvassers had with them a brochure showing the architects' drawings of the proposed exteriors, a map giving the location of each building and a list of reasons why the proposition should be approved.

At each home the volunteers left behind a stenciled handbook of information on the scope of the program, the age and obsolescence of most of the buildings, the annual cost in dollars for liquidation of the indebtedness and answers to 14 pertinent questions that had been raised.

When the campaign began the outstanding indebtedness was only $508,000 and this amount would be completely paid off by 1943. During the preceding twenty year period the school budget provided for an average bond payment of $123,717. By the end of 1942 all former issues will be liquidated.

From 1942 on, the annual amounts to meet the schedule of payments on the new bonded indebtedness will range from $91,990 to $97,970. Payment of the higher of these two sums represents $60,183 less than the payment of the year immediately preceding it. No payment during the twenty year term starting in 1939 will equal the sum paid in 1938-39 and yet in three of those years a balance of $261,000 from former bond commitments must be paid.

It was fortunate, of course, that the present program could be inaugurated toward the end of another bond payment period. As of June 1940 the bonded indebtedness of the district was less than half of the bonding capacity under the law.

The dominant note of this reconstruction program has been community use. The plans, which are almost identical for the six schools, have as their center a social and recreational unit for the citizenry.

A commodious vestibule and foyer lead directly to a community club and reading room, an auditorium seating 400 and a gymnasium of standard size with lockers, showers, apparatus rooms, kitchenette and instructor's office adjoining.

Also for community use on the second floor immediately adjoining the main foyer are the science, art and music departments, with a large library. These compactly grouped activity units may be completely separated from the classroom areas for use at night as a social center.

Auditorium murals in handblocked paper keynote the decorating. The mural, "War of Independence," above, demanded two tones of gray as background. Solid dadoes in darker shades form a base for these decorations.

Teachers Need Social Security, Too

D. C. BRONSON

Assistant Actuary, Social Security Board

OF THE three broad benefit paying programs of the Social Security Act,[1] the contributory old age and survivors' insurance system with its contributions obtained through pay roll taxes provides benefits to all those who qualify without regard to any test of need.

Monthly insurance benefits are provided to retired insured workers 65 years of age and over, their wives and their widows, and to the widows and children of insured persons who die prior to the age of 65. In certain cases, in the absence of other qualified survivors, monthly benefits are provided to the aged dependent parents of insured workers and lump sum payments are made on the death of an insured individual who leaves no survivor immediately entitled to monthly benefits.

Primarily Protects the Aged

Thus, in addition to the emphasis upon old age protection, there is a well-rounded program to provide for survivors in the event of death. It may be stated roughly that this program for survivors' benefits constitutes about one fourth of the system's entire benefit scope. Hence, with three fourths of the benefit scope directed to the retired aged, the plan must still be recognized as primarily one of old age protection. This is an important consideration in the present discussion since among teachers a substantial proportion are single individuals having more personal interest in the old age features than in benefits for survivors.

State and local employes were excluded in the original 1935 act and in the 1939 amendments, probably for three reasons: (1) doubt as to the taxability of employes on their wages; (2) doubt as to the taxability on pay rolls of states and localities when viewed as employers; (3) belief that public employes already were well cared for by means of pensions.

A brief examination of item 3 is in order in view of the importance it is receiving in current discussions. It is estimated that there are about 950,000 public teachers in the country of whom roughly 700,000, or nearly three fourths, are covered in some manner by some kind of retirement program. For public education employes other than teachers, the coverage is much lower; perhaps out of about 275,000 such employes, one third with some degree of retirement provision is a liberal estimate.

It is taking too much for granted, however, to assume that three fourths of the teachers in the country can be dismissed from consideration as being adequately planned for under existing systems. First, several of these plans, involving more than 100,000 teachers, are still only "on paper" so they can scarcely have much weight as representing present protection. Second, only a fraction of those under established plans will live and persist through in their present systems to qualify for retirement benefits. There will be withdrawals on account of death, disability, marriage, taking another job and a variety of reasons. Third, since the systems are certainly in many cases resting on shaky financial bases as to either contribution rates or reserves or both, it can be expected that reduced, deferred or even abrogated pension rights will be the rather tragic result in some instances.

Harsh Qualifying Conditions

Again, teachers' retirement plans often impose rather harsh qualifying conditions as to length of service, the fulfillment of which, especially when most of the service is required to be rendered within one particular system, must often be impossible to achieve, at least within an age limit at which the plan should be operating effectively in clearing the superannuated from the active list.

Consequently, to say that 75 per cent are now cared for is a statement that will not bear scrutiny. In reality, it merely tells us that at least 25 per cent of the country's teachers have now no opportunity even to get started on the road to accumulating retirement credits. We know that of the "covered" 75 per cent a large but indeterminate proportion will drop out, fail to qualify or find curtailed benefits ahead.

I have not been able to find much in the way of reliable statistics on the rate of withdrawal among teachers. The number terminating each year, however, must be large in absolute numbers and relatively large at some age groups. There is usually no provision or incentive for the teacher to leave deposited with the system his credits in the form of a deferred retirement benefit. Each one of the thousands of cash surrenders every year represents a little transaction in defeat of old age protection.

Death Benefits Inadequate

Just a word on one other important point for our scheme of reference as to teachers' contributory plans. The death benefit before retirement is in almost every instance a direct function of the contributions made by the teacher, thus increasing with age and duration. Consequently, teachers with dependent survivors receive less death benefit protection during the period they need it most, with the preponderance of protection applying when they are older and when, as a rule, the dependency condition has been reduced or eliminated. This is particularly true in the case of married male teachers with young children. Moreover, the usual death benefit is payable in a lump sum which, when there are dependents, is likely to create a problem of how best to invest and conserve this payment.

The broader the base of coverage and insured status under social security, the greater its all-round achievement, both within categories of employes such as teachers in furnishing a "floor of protection" backed by the federal government and as an overall enhancement of the nation's welfare. In addition to providing this

[1] The three programs are: public assistance, including benefits to the needy aged, blind, and dependent children, on a federal-state cooperative basis; unemployment compensation on a federal-state basis, and the federal old age and survivors' insurance discussed herein.

"floor of protection" for old age, the extension of social security would bring to teachers with wives, children or dependent parents millions of dollars of "life insurance" in the value of potential monthly benefits to such survivors as would qualify under the provisions of the act.

To the extent that there still exist exempted areas such as public employment, the full benefit of the law continues to be curtailed since, unlike the gaps in continuity and successive defeat of old age protection mentioned before as occurring under state and local plans at termination of employment, the framework of the social security system is such that both continuity in retirement credits and preservation of the primary protection are maintained regardless of the number of shifts in employment within the area of the coverage. So long as the coverage is not universal to all employments there remain impediments to the full operation of the law.

No Need to Junk Local Plans

Extension of the Social Security Act's old age and survivors' insurance could be achieved without the elimination of the existing systems. Recognizing that the basic social security benefits of themselves are inadequate retirement allowances for career or civil service public employes whose choice of employment is somewhat influenced by the attractiveness of provisions for their welfare, the sounder systems could be adjusted to provide supplemental benefits and the weaker systems could be adjusted and, by this means, greatly strengthened. These adjustments would take time and intensive study and, because of the widely differing structure and specifications of state and local plans, there is no rule of thumb as to just what adjustments would best serve in bringing the various plans into consonance with an extended Social Security Act.

The first definite action that called the matter to the attention of the interested employe groups themselves came with the introduction into Congress on Aug. 14, 1940, of the Wagner Bill, S. 4269 (H. R. 10384 is a companion bill in the House introduced by Congressman McCormack). This measure, in addition to material extensions of coverage to other groups, provided for the removal of the exemption of state and local employes, thereby bringing them into the complete operation of the old age and survivors' insurance of the Social Security Act.

The areas with no retirement provision, and numerically by location they are in the majority, have in general endorsed the aims of the amendment, while representatives of existing local retirement plans have, on the whole, opposed the bill's approach to the problem, although individual members in many of the systems have indicated a general support of the bill's objectives. Of course, this Wagner Bill approach would be a permanent solution only if the courts, with which the final determination would lie, decided that a nondiscriminatory, nondestructive, general welfare tax on state and local governments as employers was constitutional.

The effect of the original S. 4269 is clear, namely, the inclusion under social security of all state and local employes. The purpose of the subsequent amendment is likewise clear, namely, to include under social security only those state and local employes not protected pension-wise by a state or local program. The purpose is clear but the effect is not. Such state and local programs now established or set up in the future would constitute an exemption for the members thereunder. This approach would preclude coverage under social security as long as any vestige of a plan for retirement protection existed. A system that wished to make its benefits coordinate and supplementary to the social security floor would be stopped by law.

"Fund" No Excuse for Exemption

Since no criteria or standards as to what would pass as a "fund" are suggested, rather ineffective plans (such as setting a late retirement age, or establishing an absurdly low benefit) could be set up in unprogressive areas to render state and local employes exempt from social security.

The approach used in the proposed change in S. 4269 would continue the present impediments to the full operation of the Social Security Act. The discriminations, anomolies and disqualifications would continue to pile up through the shifting of public employes between job areas, some of which would be exempted because a "fund" existed and others would be included for lack of a plan. Survivors' benefit protection would also continue to be denied in the "fund" areas to several millions of public employes including several hundred thousand teachers. A public employe exemption based upon the existence of some plan or "fund" is neither a practicable nor a satisfying solution.

This Basic Protection Needed

There have been suggestions for attacking this problem differently than by categorical exclusions. Complete extension or extension with certain categorical exemptions would depend upon the ruling of the courts as to the constitutionality of an employer's tax on the local governments. This question would be obviated if inclusion in the social security system were made voluntary on the part of states or lower levels of government within the states. Through making a compact with the federal government, any tax immunity that does exist could be waived and the full operation of the federal old age and survivors' insurance program could be enjoyed by the public employes within the purview of such a compact. This approach, on a voluntary basis by groups, would provide the opportunity for the more than 1,500,000 nonprotected state and local employes (including 450,000 public education employes) to obtain the basic protection of the act upon which they could later build supplementary plans. Also, and equally important, it would not preclude public employes with existing retirement plans, good, bad or indifferent, from obtaining the social security floor of protection.

It is pertinent to point out that if in 1935 or in the amendments of 1939 (or in the future) the program had been established to provide minimum universal old age benefits for everyone above a certain age, say 65, public employes would, of course, have been included in that universality of scope and supplementary state and local plans today would be in operation in practically all areas in which adequate local retirement plans had been carrying or attempting to carry the full burden.

The opinions expressed herein are not to be taken as representing the views of the Social Security Board.

Library Club Is Service Activity

GRACE BRUCKNER
Librarian and Director of Assemblies
Meeker Junior High School, Greeley, Colo.

AMONG the many club activities of Meeker Junior High School, Greeley, Colo., the Library Club is perhaps the most important in scope and value. The club gives training to a large number of pupils each year, a functioning activity that is of vital importance to the pupil and to the school.

Being a member of the Library Club is a genuine honor and every pupil feels he is doing a distinct and important service to his school. Members of the club are assistant librarians who enjoy their work and take their responsibilities seriously.

The duties of the assistant librarians are many and varied and the opportunity for in-service training is the best. Pupils gain a working knowledge of library science, learn the importance of accuracy, the joy of helping others, an appreciation of the vast amount of work behind the librarian's desk, the value of an intimate association with books and close friendship with fellow pupils.

The picture story of the activities of the Library Club in Meeker Junior High School came into being when it was to be represented on a parent night program planned to show the various activities of school clubs. The help of the visual education department was enlisted to take pictures of members of the club. The club membership runs from 35 to 40 pupils each quarter.

The avenues for service, interests and activities are endless. Many times the Library Club sponsors all school projects. Recently the club sponsored an old magazine and paper sale, enlisting the help of the student council and of each homeroom. To our great surprise and amazement pupils gathered a stack of old magazines and paper weighing 8 tons! The amount of money we realized was not important. The teamwork displayed by homerooms and sponsors, the good will and the fun of working together were the all important and valuable things. At the close of the old magazine and old paper campaign youngsters were heard saying, "If the 7B-5's did beat us, it was fun anyway!"

Left: Members of the Library Club selecting good books to read and arranging them on a display table for the attention of fellow pupils.

Right: Members of the Library Club tend to the business of checking out magazines and recording at the call desk the fines collected on overdue books.

Left: Pupil librarians deliver overdue notices to pupils through the medium of the homeroom teachers' mail boxes in the main office. Other pupils shelve books.

Right: At the end of the day pupils read the day's report and check the attendance and circulation in the school's library.

Making the Most Out

W. F. HIMMELREICH

From "All the Children"

Samplings of radio listening habits of pupils in the home might well be made from time to time to determine the effectiveness of educational radio programs during out of school listening.

SOME city school systems are using radio as a medium for direct teaching and are satisfied, after experimentation through their own broadcasting, to go so far as to use their own short-wave transmissions and to supply their schools with radio sets especially built for schoolroom use.

Observations indicate that the radio affords a means of supplementing and enriching the school program in general and that it fills certain gaps and provides certain functions in the curriculum.

To what extent radio is contributing to educational objectives, either general or specific, is, because of the intangible values and the difficulty of separating radio from other factors, a matter difficult to decide.

Ohio State University's research department is making a study of radio and is endeavoring over a period of several years to develop technics valuable in the evaluation of school broadcasts. To this end the General Education Board has set aside funds to be used in the promotion of studies in several areas throughout the country.

Commercial, industrial and political agencies consider radio an effective device for the purpose of advertising, disseminating information and influencing public attitudes and beliefs. All of this indicates that organizations desirous of making their contributions to national attitudes, leisure time concerns or cultural interests should proceed upon the same assumptions and utilize radio to furnish experiences of educational and cultural worth, regardless of the lack of paper and pencil evidence of whether or not radio is effective. If commercial and industrial concerns are satisfied over a period of years that values that bring financial results are evident because of radio, educators need not hesitate to give time and study to the project.

A school's radio listening program should be as varied and extensive as it is possible to make it within the limitations of time, the broadcasting schedules and the administrative barriers inherent in the school system. It is only by making use of the radio programs as they now exist and by obtaining objective and subjective evidences of their worth that we can expect to make suggestions for their improvement or hope to have broadcasters extend the scope of their offerings.

School radio programs should be varied enough to give teachers and pupils an opportunity to hear and judge many types and kinds of presentations. How else will it be possible to develop discrimination in choice of program?

Radio programs should be studied as to the contributions they might be making to one, several or all of the following major categories: appreciation, interests, critical thinking, creative expression, social behavior, personal and social integration and skills and technics.

The kind and type of broadcast selected from those available are dependent upon such factors as: age level, subject, activity unit and the particular purpose for which the radio lesson is intended. Upon the lesson purpose will also depend the kind of prebroadcast preparation, the listening technic employed and the nature of the followup. In this respect the radio program selection would differ little from the method employed by any good teacher to determine other aids and sources of information in the teaching of a certain unit of work.

Having selected a particular broadcast program for a particular classroom or listening purpose, in or out of school, the effectiveness of the program is dependent upon several factors:

1. How closely do the objectives which the producers had in mind harmonize or correlate with those which the teacher has selected?
2. What is the special activity the program is to supplement or enrich?
3. What specific data, information

# of Radio

Superintendent, Guernsey, Wyo.

or appreciation are the listeners expected to observe?

The individual or individuals in charge of administering the listening program should list upon the school bulletin boards or, better still, upon a special radio bulletin board in the main school corridor all the broadcasts available, time on the air, nature and kind of broadcast, network and local station, together with a brief description whenever possible. The available material in the nature of descriptive bulletins and pamphlets should be placed in the library.

Teachers and pupils should be encouraged to select programs from the areas of information, inspiration and recreation. Attention should be called to the broadcasts available both during and outside of school hours, programs of specific and general interest, those to which voluntary listening is suggested as well as those which teachers might list with suggested library reading and other supplementary sources.

In this way in the course of time there will develop an interest in radio, which will result in teachers and pupils becoming more concerned with the possibilities radio affords.

As a guide to intelligent development of a school's participation in radio, technics concerned with the present interests should be devised. A check list composed of various kinds and types of radio programs may be employed and the pupils asked to check their favorite programs.

If observations are to be made concerning the shifts in interests and the discriminations in selections, serving as the basis for other studies, samplings of pupil's radio listening might be made during several school intervals. From pupils' radio notebooks, teachers' observations, anecdotes and tests, evidence will accumulate that will serve to determine the effectiveness of the programs, the shifts of interests, growth and development toward objectives under consideration.

RADIO SURVEY

Name_____ Age____ Grade____ Date_____

1. Do you have a radio in your home? Yes____ No____
2. If not, do you have access to a radio? Yes____ No____
3. How many members of your family listen to a radio? _____
4. Do you have a definite entertainment program? Name_____ Time_____
5. Do you have a definite recreational program? Name_____ Time_____
6. Do you have a definite educational program? Name_____ Time_____
7. Do you have a definite newscast program? Name_____ Time_____
8. Do you take notes on these broadcasts? Yes____ No____
9. Do you transfer these notes to your classroom discussion? Yes____ No____
10. Do you and your family discuss the nature and content of these broadcasts after the broadcast? Yes____ No____
11. List classes in which definite programs are assigned_____
12. List programs that help you in your school activities_____
13. List programs that create a stimulation for further study:

    Program_____ Subject_____ Time_____
14. Are you compiling a radio program notebook? Yes____ No____
15. In what subjects are you preparing a notebook? _____
16. Do listening and taking notes from a radio broadcast aid you in listening and taking notes in your classroom work? Yes____ No____
17. Would you like to have more participation in radio in the school? Yes____ No____
18. If so, state your special interests_____

Report Card Ratings

IRVING MUNSON

A RECENT study of report cards in 15 city school systems in Illinois was made to determine the character and extent of the information that each school system attempted to convey to the pupil and his parents by means of the report card and to ascertain what basic and fundamental traits of character and citizenship were given consideration on the report card through some system of rating.[1]

The study consisted of listing the traits and recording the explanatory material on which the rating of each trait was based. From a total of 27 types of report cards it was possible to list 18 distinctive traits, although there was some overlapping in the explanatory material. No school system had a report card containing all of the 18 traits. The traits, the explanation of each trait and the facts to be considered in rating the pupil on each trait were listed and organized as follows:

Accuracy: Accuracy implies freedom from mistake or error. Among the many questions to be considered in determining whether or not the pupil is acquiring a satisfactory degree of accuracy, the teacher must note the following:

1. Does the pupil copy words and sentences correctly?
2. Does he frequently or only occasionally omit a word in written sentences?
3. Does he present work in the four arithmetical fundamentals that has seldom less than two or more errors?
4. Does he use proper capitalization and punctuation?
5. Does he cross the T and place the dot over the I?
6. Does he connect the letters in the written word?
7. Does he write U for W, M for N or E for I?

Attention: Attention is the focalization of consciousness upon the process and upon the activity to be attained. In determining whether or not the pupil is giving a great deal of attention to the activity to be attained, the teacher must consider the following:

1. Does the pupil "launch himself with as strong and decided initiative" as possible?
2. Does he "suffer too many exceptions to occur" before the activity is completed?
3. Does he follow directions as given by the teacher?
4. Does he begin his work promptly?
5. Does he ask unnecessary or unrelated questions?
6. Does he complete the assigned activity or does he revert to other activities before the assigned activity is completed?
7. Does he appear to center his thinking on some other activity?
8. Does he listen attentively in group discussion activities?

Cleanliness: Cleanliness implies that the pupil's person, dress and materials must be clean. It also implies that the pupil must be free from whatever sullies, contaminates or defiles. In rating the pupil on cleanliness the questions which the teacher must consider may be stated as follows:

1. Does the pupil comb his hair, clean his finger nails, brush his teeth and wash his hands and face before coming to school?
2. Does he keep his textbooks, work books, notebooks and other working materials free from dirt and filth and unnecessary finger markings?
3. Do his conduct and speech in the washrooms and on the playground always manifest cleanliness?
4. Does he use or only pass over the door mats when entering the school building?
5. Does he have a handkerchief and make proper use of it?
6. Does he heed the teacher's instruction pertaining to bathing?

Cooperation: Cooperation in the school is collective or harmonious action for the general welfare of all the pupils. In determining whether or not the pupil is acquiring a genuine willingness to cooperate, the teacher must consider the following:

1. Does the pupil get along well with other pupils?
2. Does he show that he is thoughtful of other pupils?
3. Does he respect the property of the other pupils?
4. Does he do his part in promoting and encouraging a good school spirit?
5. Does he contribute to group activities?
6. Does he help in carrying out suggestions to the other pupils?

Does He Help Others?

7. Does he give helpful suggestions to other pupils?
8. Does he help keep the building in order and the grounds neat and clean?
9. Does he refrain from writing, marking, carving or scratching the desks in the classroom and the walls of the room and building?
10. Does he show that he is willing to assume leadership when the occasion arises?
11. Does he await his turn and refrain from interrupting the pupil who is contributing to the class or group discussion?

Courage: In a general sense, courage is that firmness of spirit that meets danger without fear. But in the school it implies strength of character, especially moral character. The questions that the teacher must consider in rating the pupil on courage are as follows:

1. Does the pupil stand for the truth, even if it hurts?
2. Does he willingly admit that he is wrong?
3. Does he try to make things right when he is wrong?
4. Does he willingly help the teacher and other pupils to rectify a situation that is wrong?

Courtesy: Courtesy implies proper respect and consideration of others. In determining whether or not the

[1]These 15 city school systems were located in the northern half of the state outside of Cook County. The population of the smallest city was 5300 and the population of the largest was 105,000. The enrollment in the first eight grades of the 15 school systems varied from 600 to 9000. Only report cards used in the first eight grades were included in this study.

# of Pupils' Character Traits

Superintendent, Kankakee, Ill.

pupil is improving in courtesy, the teacher must consider the following:

1. Does the pupil greet the teachers and pupils in a polite and pleasant manner?
2. Does he obey promptly and cheerfully?
3. Does he refrain from interrupting other pupils who are engaged in conversation?
4. Does he place the welfare of others first?
5. Does he try to acquire the "please" and "thank you" habit?

Dependability: Dependability implies that the pupil is trustworthy and reliable. In rating him on dependability, the teacher should consider the following:

1. Does the pupil manifest unquestionable honesty in tests, written work and special assignments?
2. Does he willingly admit the errors or mistakes that he makes in oral and written work?
3. Does he obey the rules and regulations of the school even though the rules and regulations are not always obeyed by all of the other pupils?
4. Does he do his work without constant checking and followup by the teacher?
5. Does he possess a commendable attitude toward behavior so that he can be trusted in the absence of the teacher?

Health: Health implies sound living. It also implies that the pupil must acquire a working knowledge of the fundamentals of healthy living and form good health habits. In rating the pupil the teacher must determine whether or not the pupil is trying to observe the following:

1. Does the pupil use his handkerchief?
2. Does he refrain from picking his ears and nose?
3. Does he keep pencils and other materials away from his mouth?
4. Does he remove his coat or sweater and rubbers in the cloakroom?
5. Does he practice good sitting and standing postures?
6. Does he show evidence of proper sleep and rest?
7. Does he keep hands, face, nails and teeth clean?

Industry-Work Spirit: In a general sense, industry implies steady attention or diligence in any pursuit. In rating the pupil on industry or work spirit, the teacher must consider the following:

1. Does the pupil take pride in doing his work well?
2. Does he come to class well prepared day after day?
3. Does he plan to use his time profitably?
4. Does he put forth honest effort and do the best that it is possible for him?
5. Does he ask for help only in situations in which he already has given his very best?
6. Does he anticipate his needs and refrain from borrowing?
7. Does he complete the tasks that he begins?
8. Does he work without being urged by the teacher?
9. Does he concentrate and work independently of other pupils?

Initiative Implies Originality

Initiative: In common usage initiative implies ability or power to originate an activity. In rating the pupil on this trait, the teacher must consider the following:

1. Does the pupil volunteer any information in recitation work?
2. Does he continue with his work outside of school and, as a result, report interesting findings to the class?
3. Does he take steps on his own accord to make the work profitable and interesting?
4. Does he voluntarily engage in activities outside of school that relate to the activities of the classroom?

Neatness: In rating the pupil on neatness the teacher must consider not only the pupil's dress and appearance but also his work or the product of his efforts. The questions to be considered are as follows:

1. Does the pupil keep his desk and materials in good order?
2. Does he do his written work neatly and carefully?
3. Does he keep his clothing in good repair and as clean as possible?
4. Does he help to keep the room neat and tidy?
5. Does he try to produce all written work in commendable form?

Obedience: Obedience implies submission to rightful authority. In determining whether or not the pupil is obedient, the teacher should consider the following:

1. Does the pupil obey promptly and willingly?
2. Does he obey the rules and regulations regarding the halls and corridors?
3. Does he obey the rules regarding the outdoor and indoor recess?
4. Does he obey the rules pertaining to the fire drill?
5. Does he obey those in authority without manifesting a sulky attitude?
6. Does he cheerfully accept the responsibility that comes through the operation of the rules?
7. Does he see the necessity of the rules and regulations being enforced?

Open-Mindedness: Open-mindedness implies a receptive and tolerant state of mind. In rating the pupil on this trait, the teacher should consider the following:

1. Does the pupil evaluate the material that he reads?
2. Does he believe everything he reads because it is on the printed page?
3. Does he respect the opinions of other pupils?
4. Does he withhold his judgment concerning incidents or people until he has weighed the facts in the situation?

Promptness: In a general sense promptness implies quick or immediate action. In rating the pupil on promptness, it is necessary to consider the following:

1. Does the pupil come to school on time?
2. Does he begin his work as soon as he is seated and without any delays?
3. Does he begin and finish his work on time?
4. Does he have his books and supplies on hand when they are needed?

5. Does he complete makeup work without unnecessary delay?

6. Does he put on and remove his wraps quickly?

Respect for Others' Rights: Respect for the rights of others implies that each pupil has certain natural, legal or moral privileges that should not be subjected to the infringement, encroachment or transgression of other pupils. The teacher should study each pupil and note the following:

1. Does the pupil monopolize the use of reference materials?

2. Does he stand longer than necessary at the drinking fountain?

3. Does he take his turn or does he use the playground equipment more than any other pupil?

4. Does he try to get more than his share of attention from teachers?

5. Does he manifest a tendency to be heard too often in discussions?

6. Does he always try to take the best eraser and crayon at the blackboard?

7. Does he deliberately take more than his allotted time in discussion and more than his allotted space at the board?

Respect for Property: The pupil should be impressed with the fact that the property must serve several generations of pupils in the future. In determining whether or not the pupil respects property, the teacher should consider the following:

1. Does the pupil manifest tendencies to mar or soil school property such as desks, books and equipment?

2. Does he slam doors, jerk shades and lower windows with unnecessary force?

3. Does he exert unnecessary strain on the desk or seat?

4. Does he use his body or his feet when he should use his hands?

5. Does he have an inclination to throw small objects without regard for the window panes?

Self-Control: Self-control implies moderation in thinking, speaking and doing. The questions that the teacher must consider in rating the pupil on self-control are as follows:

1. Does the pupil use a moderate and quiet tone of voice when speaking in halls, corridors, cloakrooms and classrooms?

2. Does he exercise control of himself so that his thoughts are not distracted when he is working in the classroom?

3. Does he refrain from unnecessary talking during study hours and between class periods?

4. Does he manifest a careful and well-balanced temper under trying circumstances?

5. Does he keep his temper under control when the situation is challenging or unusual in character.

Thrift: Thrift implies saving and the elimination of waste. In rating the pupil on thrift the teacher must consider the following:

1. Does the pupil take good care of books and materials?

2. Does he avoid wasting pencils and paper?

3. Does he avoid letting too much water run at the drinking fountain?

4. Does he manifest a thrifty attitude in his reactions to all classroom discussion of thrift and economy?

Bismarck Has "Band Boosters"

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A 45 PIECE high school band of championship caliber and no funds to send it to the state high school music contest nearly 300 miles away at the University of North Dakota at Grand Forks!

This was the situation in April 1937 at Bismarck High School, Bismarck, N. D., which brought into being an organization unique in school circles, the Bismarck Band Mothers Club. As a result the band went to the university and was topped only by the Grand Forks musicians, who placed first for the sixteenth consecutive year.

Officially known as the Bismarck Band Boosters, the object of the organization as set forth in its constitution is "to promote the bands of the Bismarck public schools and encourage their activities." The membership consists of parents of band members whether grade school, junior or senior high school. They meet once a month at 4 o'clock. There are more than 200 children taking band work in the schools and the present membership in the Band Boosters is about 150.

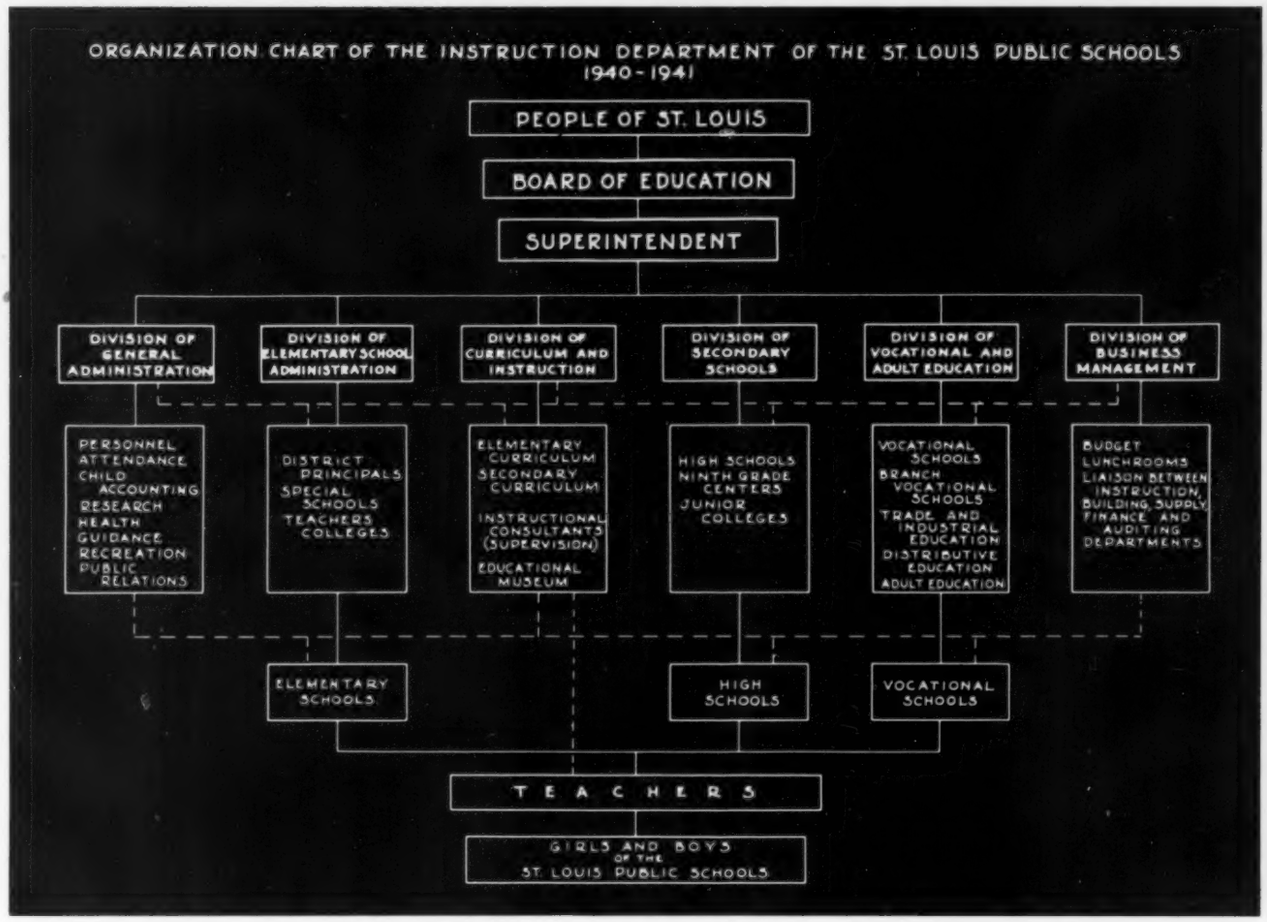
There is dual control of the Bismarck band. The board of education has no authority over it, although it pays part of the director's salary. Funds are allocated for the support of the band from the Community Chest Fund and the administration is in the hands of a committee from the Association of Commerce. The band is called upon to play at numerous civic enterprises and to boost the city in neighboring communities. However, the band rehearses in the school building during school hours, wears the school colors and is subject to school discipline and scholastic requirements.

The energetic band mothers have held rummage sales, benefit bridge parties and candy sales to raise money. They have sponsored movies at local theaters and concerts by visiting college bands. They have sold ice cream and hot dogs at public gatherings. They even staged Bismarck's first dog show and made a success of it.

The working setup consists of a committee appointed for each month of the school year; each committee sponsors a money raising project. They have financed the annual trip to the state contest, bought several instruments for the band and this year hope to interest other clubs in the city in helping to buy uniforms to replace the present maroon sweaters and white trousers.

Instead of sending such a large group of young people across the state in automobiles with the ever-present danger of highway accidents, the spring trip is made in a special railroad car. For many of the players, accustomed to vacation trips in the family car, this is their first train ride. As only the most proficient and mature players comprise the contest band, there are about 30 young musicians who cannot make the trip. To reward them for their faithfulness, the band mothers annually arrange to treat the stay-at-homes to a motion picture show with ice cream afterward.

The increased interest in music and the improved morale and performance of the band have been ample justification and reward for the Bismarck Band Boosters.



A Logical Administrative Setup

HOMER W. ANDERSON
Superintendent of Instruction, St. Louis

A LARGE school system must be organized so that its parts function together with accuracy and dispatch. There must be coordination of all the units if the system is to work smoothly in producing an effective program for the education of boys and girls. Each division must have its functions and its proper position. An administrative plan designed to meet these requirements has just been introduced in St. Louis. It is simple, logical and practical.

On the recommendation of the superintendent, the new plan was adopted by the board of education at its September meeting and is now being put into effect. It calls for the creation, in the instruction department, of six divisions each headed by an assistant superintendent: (1) general administration; (2) elementary school administration; (3) secondary school administration; (4) vocational and adult education; (5) curriculum and teaching, and (6) business management.

The assignment of assistant superintendents on a functional rather than a geographic basis, as was formerly the case, is suggested in the report of the survey of the St. Louis school system made in 1938-39.

Before going farther, it may be well to note the general organization of the St. Louis board of education. The board, which operates under a charter granted by the state legislature, has at present five coordinate departments: finance, building, supply, auditing and instruction. The superintendent of instruction is responsible for those activities directly related to the teaching of children.

The 1938-39 survey has recommended the adoption of a unified plan of organization in which all departments will be brought together under a single executive, the superintendent of schools. The board's legislative committee is now working on a bill to make this change possible and it probably will be passed during the next session of the legislature. The newly formed organization can be easily expanded to meet this wider responsibility.

The new plan will affect directly more than 100,000 children and about 3300 teachers, principals and supervisors. An idea of how it will work can be obtained from the following brief outline.

General Administration: This division will take charge of all services involving teacher, clerical and pupil personnel. Several subsidiary departments are necessary to render these services, namely, personnel, guidance, child accounting, attendance,

hygiene, recreation and research, including both statistical and psychological work. Included in this division will be public relations and other departments that may be found necessary as the program develops.

Elementary School Administration: The organization of elementary schools will be built around the assistant superintendent as the coordinating and executive officer. Under him will be nine district principals, each of whom will be assigned to an elementary school as principal and will, in addition, have supervision over a number of neighboring elementary schools. Missouri state law requires separate schools for Negroes and one of the newly appointed district principals is a Negro. Each district principal will have an assistant principal to help him in managing his home school.

The advantage of this system of elementary school administration is apparent. In the first place, each district principal's headquarters school should become a center in which important plans and policies may be thoroughly tried out and critically observed before being installed in the entire school system. For example, a new course of study may be ready for use. The district principals will try it out in their own schools to determine the workability of the course and the best method of putting it into operation in elementary schools of their respective districts. In the second place, the district principal's school, through the use of the assistant principal, will form an excellent training ground for future elementary school principals. In other words, the line of promotion might possibly be to an assistant principalship under one of the district principals, to an elementary school principalship and to a district principalship. This division will also have charge of special schools for physically, mentally and morally handicapped children and of the two teachers' colleges.

Secondary School Administration: This division has not been changed, since it has been in operation under an assistant superintendent for some time. Under it will be included all matters pertaining to the administration of the city's 10 high schools, two junior colleges and seven ninth grade centers. The ninth grade center is a St. Louis innovation in which, as an economy measure, a portion of the first year high school enrollment is accommodated in conveniently located elementary school buildings.

The St. Louis schools have been set up to give well-rounded education.

Vocational and Adult Education: St. Louis has two technical high schools which, in addition to giving regular training to youngsters, carry on a network of day and evening extension courses. Evening classes for adults are also held in seven high school buildings. This work has been organized along functional lines under the direction of an assistant superintendent and the new plan will make no change in its operation.

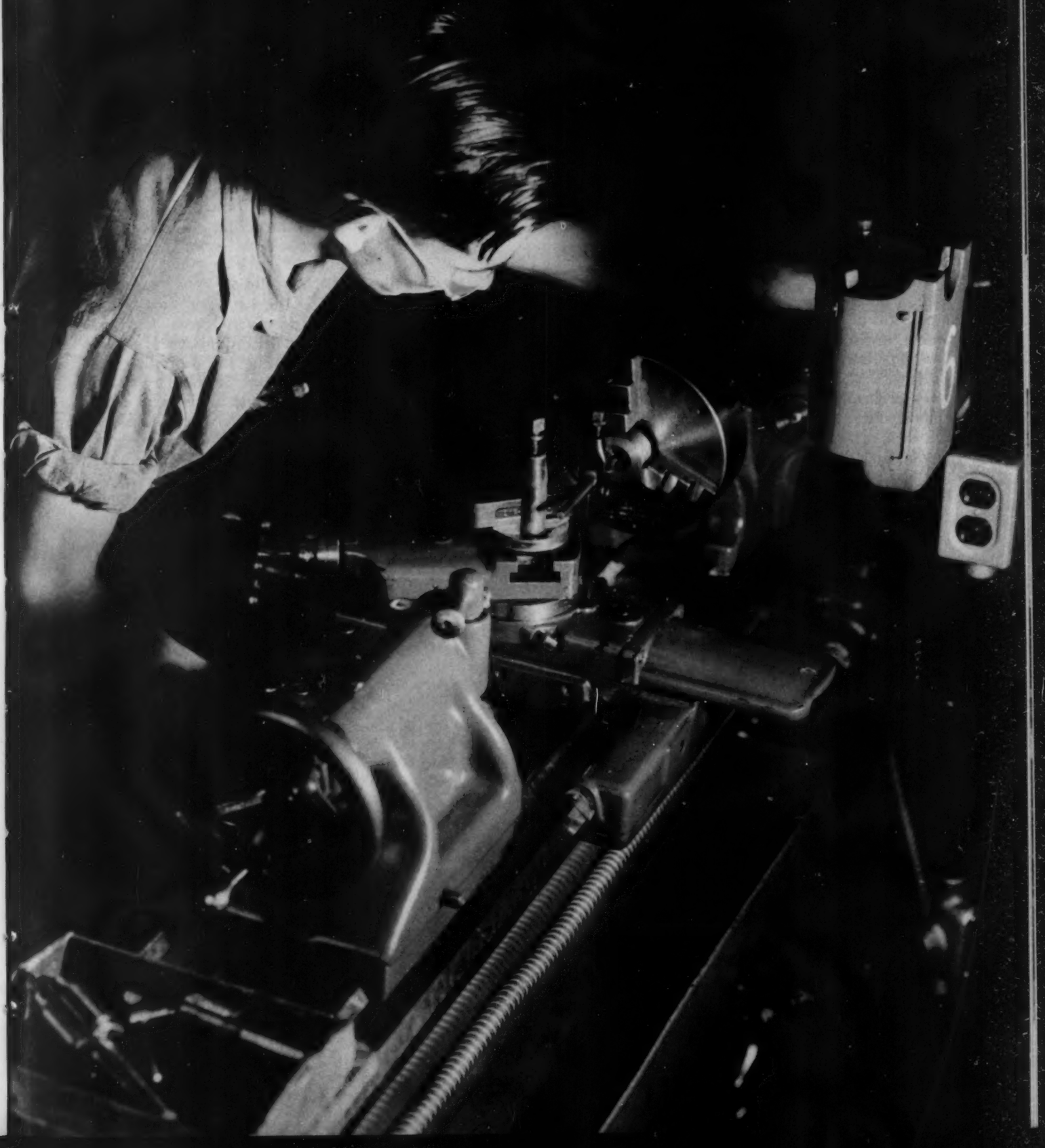
Curriculum and Instruction: This is a new division, yet most of its functions are not new. There have been employed supervisors and directors who have been mainly concerned with the improvement of instruction. All of these employes will become members of this division and their work correlated and related to the stimulation and improvement of education by the assistant superintendent in charge.

Curriculum study will be an important work of this division. Under the direction of trained specialists, there will be carried on continuous research on courses of study, better methods of teaching, and the reconstruction, development and improvement of the curriculums in the schools. Following careful study, the division will make recommendations for the adoption of new books, supplies and other instructional material needed for the advancement of the teaching and learning program in the schools.

Supervisors will no longer be responsible administratively for carrying out courses of studies in their respective fields. This will be done by principals under the direction of district principals and assistant superintendents. The supervisors will act as expert consultants to be called in whenever and wherever their advice is desired and needed to help forward the educational program. They may hold demonstration meetings and serve as advisers to committees of teachers and principals organized to assist in curriculum studies.

Division of Business Management: This division has already been set up and little change is anticipated for the year 1940-41. To it have been allocated the preparation of the budget, assistance in the administration of the budget and liaison between the instruction department and the departments of buildings, supplies, auditing and finance.

PORTFOLIO ON
INDUSTRIAL EDUCATION



Let's View It Broadly

ARTHUR B. MOEHLMAN

WHEN current trends and changing practices in vocational education are considered, the concept of vocational education widens. Other curricular divisions, including health, physical education, the social studies and even the fine arts, are involved. Vocational education can no longer be viewed as a rigidly compartmented activity consisting chiefly of exposure to mechanical methods and processes; rather it is to be regarded as a single area of specialization within the larger educational program.

The tendency toward highly specialized and segregated trade or technical schools cannot be viewed with indifference. The ideal administrative pattern is that of the comprehensive secondary school in which vocational training is merely one aspect of a flexible and well-balanced curriculum. Any administrative procedure that tends to produce curricular imbalance whether through narrowly specialized schools, emotional emphasis during emergencies or state and federal subventions producing curricular distortion should be examined with suspicion by layman and educator alike.

It is necessary to recognize the limited character of the public school. It has only partial responsibility for the complete educational task and it will operate more effectively when it cooperates intelligently with other community efforts.

Vocational education embraces at least seven major divisions. The competency of a school varies greatly within each of these divisions. In homemaking, commercial education and certain low mechanical skill occupations, it is possible for the school to develop in pupils a reasonable technical competence although their training will need supplementation on the job before a high degree of efficiency is attained.

In the trades, industrial education, the distributive occupations and agriculture, the competency of the school is much more limited. Here there is great need to bring school and community enterprise into close relationship. The school may give general guidance and occupational information, may provide an understanding of our technology and interdependent economic effort and may develop general skills in machine practice or a scientific background for a group of operations like agriculture. The development of real competence can be more economically and efficiently accomplished through extended apprentice training on the job. The highly skilled trades cannot be achieved overnight by institutional pronouncement.

To become a plant supervisor requires years of general shop or store experience plus special training on the job. The school can aid greatly by producing individuals who have understanding of the nature and problems involved in organization but competency itself grows out of job training. All of this preparation requires time. Their knowledge of these conditions makes industrial technicians question certain highly publicized efforts by the public school in the subvented area of the Smith-Hughes and George-Deen acts.

Shortsighted industrial and trades practices during the depression period are responsible for the present bottleneck in high mechanical skills that may have grave consequences for defense plans. This is one of the reasons why technologists are currently devoting most of their attention to the de-skilling of operations in the production of defense materials.

The intelligent administration of vocational education in its professional and subprofessional aspects demands intelligent planning. The schools need the services of a general planning agency that will be capable of providing what, for want of a better name, may be called an occupational outlook service. If institutional programs are kept flexible, they may be more easily adjusted to changing needs.

Up to 1938 not more than 15 per cent of the necessary vocational training was provided within secondary schools. The next decade should see a large extension of this important curricular activity. In more than half of the states the proper development of vocational education is contingent upon a basic structural reorganization from the archaic district to the community or county system

(*Continued on page* 48)

Trends in Trade Education

VERNE C. FRYKLUND
Associate Professor of Industrial Education
University of Minnesota

TRADE and industrial education as interpreted here includes occupational preparation for the industries. Industrial arts education, while related, is not under consideration.

The term "trade education" today has a meaning that is intended to be broad. The criterion of worthiness of an activity for inclusion under training subsidized with federal funds is that need for considerable training and occupational usefulness must be evident. Training in simple, highly specialized, operative work that has limited value in job placement is excluded.

At this point there seems need for defining the skilled mechanic because he is assumed to be losing place in the scheme of modern industrial production. It is the skilled mechanic ideal that is thought of in trade school preparation. The skilled mechanic can perform practically all the operations and knows practically all the related knowledges necessary to make any article of the kind produced in a given trade. He is a tradesman. A few such tradesmen are: carpenters, bricklayers, plumbers, sheet metal workers, auto mechanics, electricians, toolmakers and diemakers, machinists and draftsmen.

The skilled mechanic, or tradesman, should not be confused with the semiskilled worker or operative who does repetitive work, who performs one or a few operations at the most from day to day and who can do little else. A semiskilled worker may be able to operate several machines on repetitive work; still he may not be a skilled mechanic or tradesman. The skilled mechanic is a custom worker who requires considerable training in order to qualify. Most repetitive workers do not require extensive training as do tradesmen. However, there are many repetitive workers who do fairly complex work for which training is necessary.

The coming of the machine and mass production methods has created hundreds of new trades and industrial occupations of less than trade complexity, and educational preparation for them is increasing rather than decreasing in need. The great army of toolmakers and diemakers, diesinkers and setup men of many special classifications in modern production industries are but samples of a growing number of highly skilled trades that require extended training for those who wish to qualify for them.

Results of a study I made as a staff member of the Employment Stabilization Research Institute of Minneapolis in 1933 show that 44.3 per cent of the workers in 66 industries of the Twin Cities required training of from six months to seven years. There were 6650 workers under consideration. This number of workers should be adequate as a sampling for study.

In this sampling, 10.6 per cent were skilled mechanics, 78.2 per cent were operatives and 11.2 per cent were unskilled, or common, laborers. Of the operative group, 33.7 per cent required training. This percentage added to the percentage representing the skilled mechanics makes a percentage total of 44.3 for workers who need training in modern industry.

Adding this percentage of workers to the great army of skilled mechanics outside of factories who work in small shops and in service occupations and assuming the need for replacements and for filling newly created jobs, there is and will continue to be an exceedingly big task ahead for trade and industrial education. Owing to the nature of technological change, there is a tendency to shift from custom work toward repetitive work, but this does not lessen the need for training. Rather, it increases this need and creates a demand for retraining in order that effective transitions can be made. No person need expect in this day,

(*Continued on page* 48)

Practicing Preparedness

VIRGIL L. FLINN
Superintendent, Kanawha County Schools
Charleston, W. Va.

NATIONAL defense training in the great Kanawha Valley of Kanawha County, West Virginia, with its natural resources of coal, oil, gas and industries, is generally recognized as of utmost importance. The board of education has recognized the challenge and has given all possible assistance to meet the urgent demands of industry.

National defense training is integrated closely with the general program of trade and vocational education. All trade and vocational activities are supervised by a director with an assistant director, who has direct charge of the national defense activities, and by a coordinator, who has charge of day trade and trade extension classes.

The program is divided into two parts: (1) pre-employment refresher courses and (2) supplementary courses. The pre-employment courses are designed to give specific instruction for persons of legally employable age (18 years of age or over at the time of completion of the course) selected from the public employment office register and who, upon completion of the training course, will be qualified for employment in occupations essential to national defense. The objective of the pre-employment courses is to qualify the trainees for employment in specific pay roll jobs in occupations essential to national defense.

By supplementary courses is meant instruction offered to employed persons who are engaged in an occupation essential to national defense or in an allied occupation for the purpose of extending their skills and knowledge. The objective of the supplementary courses is to upgrade those individuals who have received instruction in pre-employment courses and are now employed.

Where possible, approximately 50 per cent of the refresher course trainees are selected from the local W.P.A. rolls by agreement with the W.P.A. The students remain on the W.P.A. while studying.

By November 30, 45 persons in Kanawha County, all in pre-employment refresher courses, had obtained jobs. The most popular courses by far were those in machine operation and welding.

Pre-employment refresher courses run six or eight hours a day for five days a week; supplementary courses run two to four hours a night, one or two times a week. These courses are not expected to turn out experts but to train men to do a job under the eye of an experienced foreman. For emergency needs our trade schools have designed short courses of twelve weeks' duration.

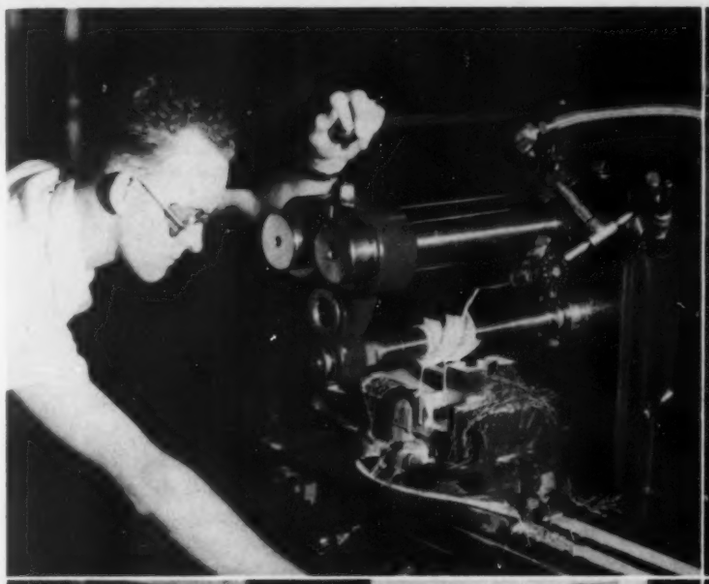
At present 155 men are enrolled in the pre-employment refresher courses and 619 men in the supplementary courses. An idea of the extent of the program can be gathered from a list of the courses offered at the present time. Pre-employment refresher courses include the following: industrial electricity, sheet metal, combination welding, machine operation, drafting, gas welding, gasoline engines and Diesel engines. Supplementary courses include: electrical construction, combination welding, sheet metal pattern drafting, elementary metallurgy, instrument maintenance, machine shop practice, gas welding and advanced metallurgy.

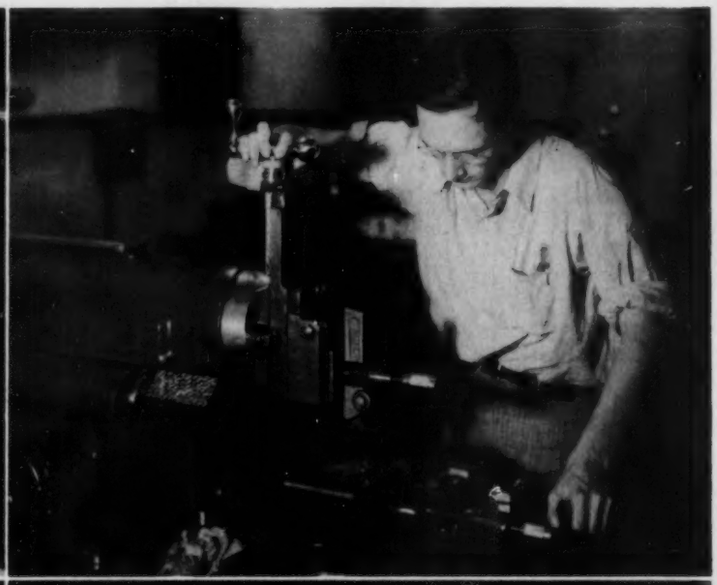
The national defense program operates upon the advice of a group of men, all experts in various industrial activities, and representatives of labor, who serve as an advisory committee for the whole trade and vocational education program. The committee meets once each week, makes plans for the following week, with such alterations or additions as are necessary with a rapidly changing program. In other words, the needed emphasis in national defense training may shift rapidly. The committee, constantly studying the situation, is always in position to make pertinent suggestions for the improvement of the program.

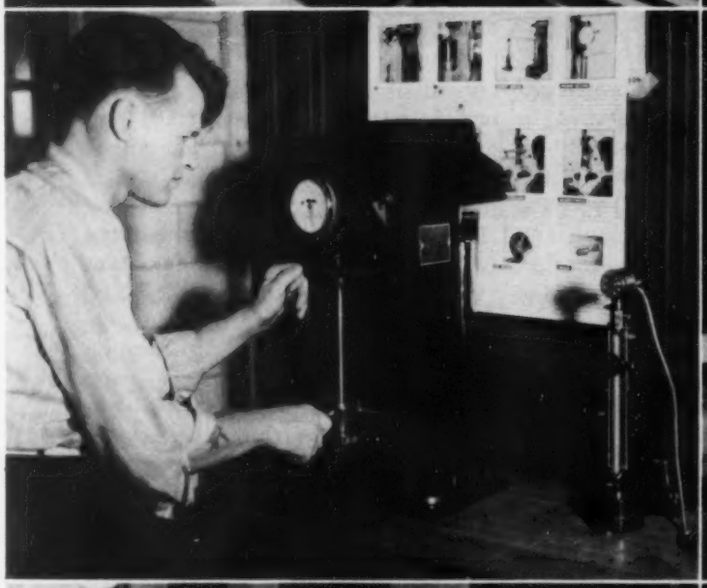
In order to publicize the program and to obtain wholehearted support from the citizens of the valley, the board of education with the help of the director and advisory committee published an attractive booklet titled, "For God and Country." The response to the booklet was most gratifying and has encouraged the division of trade and vocational education to make plans for printing and distributing further reports on its activities and efforts for national defense.

In organizing the program for defense, it was early recognized that the moral phase of defense was just as important, if not more so, than the economic, military or physical phases. Therefore, in cooperation with the Kanawha Valley Defense Committee, a plan is in operation to produce a booklet on national defense that will be used in all of the classrooms from the first grade through the senior high school.

After the teachers in the various classrooms have made use of the material, supplemented by "Our Freedom Series, Democracy Readers" and the unit studies in democracy by the North Central Association of Colleges and Secondary Schools, the pupils will be asked to take the booklets home, in order that every home in the valley may have the opportunity to become familiar with most of the problems involved in a program of total national defense.







Opposite Page: Drill press. Top of Page: Milling machine of the spindle type. Center: A laboratory testing device for finding hardness of metal. Bottom: Reading blueprints. Top: A milling machine of the blade type. Center: Putting the finishing touches on a bucket by use of an air driven crimping machine. Bottom: Teaching acetylene gas welding.

Trained Men for the Aircraft Industry

VIERLING KERSEY
Superintendent, Los Angeles

SOUTHERN California, and particularly Los Angeles, is the center of the aircraft industry, for within this area is located a major portion of the entire airplane production of the United States.

Not only are there numerous plane factories in Los Angeles but the community is dotted with smaller industries and factories fabricating parts, materials and equipment essential to the ultimate construction of the completed plane. Consequently, with an actual expansion of from 15,000 to 45,000 in aircraft industry personnel within the past year and with a backlog of orders for more than a billion dollars worth of production distributed among the factories of southern California, the responsibility of selecting, training and placing thousands of desperately needed applicants is a task of great magnitude. A major portion of this undertaking falls upon the public schools.

Every available training center, both public and private, has been called upon to carry its share of the training program for the aircraft industry. The training and placement of 30,000 employes within about a year would otherwise have been impossible. However, the expansion has far from reached a peak to date. At present, there are approximately 10,000 pupils in training in the various aircraft courses in the public high schools, junior colleges and trade schools of southern California.

Many of these trainees are enrolled in the schools of the Los Angeles city school system, attending such classes in shifts from 7:30 a.m. to 3:30 a.m. the following morning. Nor will there be any letup in the full scheduled use of present facilities if the expansion program planned by local plants, involving the employment of 25,000 additional men, materializes in accordance with forecasts recently made by aircraft executives and personnel managers. Of this number, 60 per cent will be employed in aircraft sheet metal fabrication.

The training program for the aircraft construction industry can be classified under two main headings: (1) vocational training courses and (2) job training courses. The vocational training course contemplates a broad range of skills and a period of training lasting from ten months to four years. Such a vocational training course also includes instruction in related subjects, such as trade mathematics and drafting. Consequently, the employe who has experienced a broad vocational training course has a much better expectancy of steady employment because of his versatility and his numerous skills. Should one phase of the industry find it necessary to lay off employes, the worker with broad training may continue his employment in other factory subdivisions. Personnel management prefers the wider scope of training offered under the vocational training course since employes with such a background usually provide better material for promotion and assignment to positions of greater responsibility.

The present emergency demands quantity production of airplanes immediately, so there is not sufficient time to offer a general vocational course to the vast majority of pupils placed in the aircraft industry. Requirements demand large numbers of men with single skills, so that a given operation in the construction of planes can be carried forward in quantity production. Short courses of from six to twelve weeks offering training in such skills provide the second major heading of the aircraft training program and are known as job training courses. Of course, if production schedules involve curtailment in a particular field, the job trained employe is not ordinarily qualified to transfer to another department. The possibility of continuity of employment for such an employe lies in his obtaining additional training while he is employed at his initial job. This opportunity is offered by many of the Los Angeles day and night schools.

While, in general, aircraft industry training courses come under the two headings previously described, there are a number of varieties of courses involving various types and groups of pupils. The Los Angeles city board of education maintains what are known as vocational trade preparatory classes in aircraft sheet metal in regular high schools and also at the Frank Wiggins Trade School. These classes meet the requirement for federal and state reimbursement under the Smith-Hughes and George-Deen acts and offer instruction covering riveting, hand forming and layout work of aircraft parts made of aluminum alloys. A definite training program in each of these areas has been worked out in close cooperation with the aircraft construction industry through a trade advisory committee on which serve representatives from various departments of the industry. Special emphasis, as a result of the work of the trade advisory committee, has been placed upon the following objectives:

These Points Given Emphasis

1. Knowledge of aircraft construction materials, their working properties and how to identify them.
2. Skill in the use and care of sheet metal working tools.
3. Importance of working from blueprints and observance of close tolerance.
4. The vital importance of good working habits and the necessity for recognizing factory discipline, both in the conservation of time and materials and in the observation of safety.
5. The ability to read blueprints and to use applied mathematics, a vital necessity to all of the foregoing.

In addition to the regular vocational trade training classes, instruction in aircraft sheet metal work is offered in a number of high schools as a part of the training in industrial arts general metal work. Such courses are up to date and practical since many of these general metal instructors work in the aircraft production plants during the summer vacation and during periods when the schools are closed. There is close coordination between factory and school so that many high school graduates, who have received training in general metal work, including aircraft sheet metal work and aircraft sheet metal riveting and forming, have obtained employment in local plane construction plants as semiskilled operators.

A similar practice applies to pupils with machine shop practice. Pupils who have completed a high school machine shop course are employed first in burring work, then thread mill work and, eventually, as mill production machinists. This policy is a short cut to the regular apprentice training and does not produce all-round finished machinists, but for the present emergency it is a workable plan of operation. In fact, 1500 of the June graduates, with a portion or all of the foregoing training, were placed with one aircraft concern by August 1.

Above High School Level

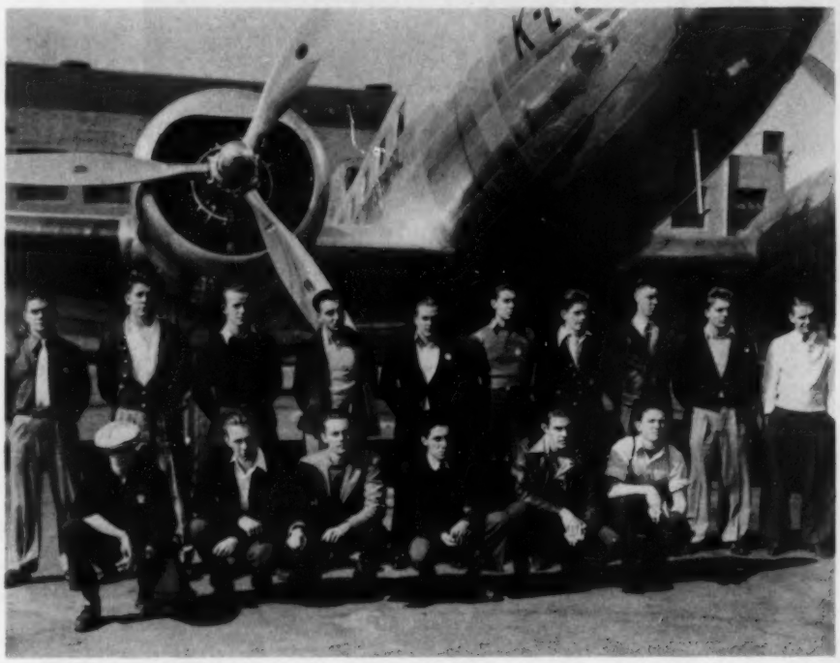
The Frank Wiggins Trade School offers a series of specialized courses that provide training for employment in the aircraft industry and which are on a level above the high school vocational training program. The Frank Wiggins Trade School course in airplane sheet metal, for example, requires ten months to complete for those who have had no previous training or sheet metal experience. Applicants between ages 18 and 25 are preferred.

The Frank Wiggins Trade School pupil progresses through various skill levels corresponding to the same levels in the industry, such as, (1) template layout man, (2) metal former, (3) riveter, (4) assemblyman and (5) sheet metal repair man. Detailed specifications, which all pupils must meet, are set forth for each subdivision of accomplishment or in terms of abilities. The objectives are as follows:

1. Ability to do definite jobs specified in these employment levels.
2. Ability to understand the facts and principles that condition the job.
3. Ability to understand and appreciate the industrial relations that affect the job.

Under present conditions placement of pupils who have completed or partially completed these courses is a simple matter. The most difficult task is to retain them long enough to ensure their receiving a broad enough training to guarantee their permanent employment. The temptation to accept employment immediately is great.

Recently one national defense training class placed 50 per cent of its students. Of these adults, many had been on W.P.A. at $57.20 per month and all were employed at salaries ranging from $155 to $250 per month. The entire class, which was one in mechanical drafting, eventually found placement although ages varied from 35 to 54. The total earning capacity per month prior to placement, based on W.P.A. allowance, was $919.70. After employment, the combined earning capacity of the group amounted to $11,036.40 per month. Before employment, this group of students experienced a training period of from two to eighteen weeks and the achievement of this class is typical of many others, particularly in the aircraft industrial trades.



These aircraft company employes are graduates of the vocational training courses at Fremont High School, Los Angeles. They helped build this plane.

High school pupils with similar training have encountered real success with some of the plane companies. For example, pupils from one of our high schools, none of whom have been out of school more than five years, hold the following responsible positions: project engineer, Douglas Aircraft Company; assistant project engineer, Ryan Aircraft Company; chief shop inspector, Northrop Aircraft Company, and chief shop checker, North American Aviation, Inc.

The same type of record is beginning to appear in the national defense training classes. Since August 1, 1716 students have been enrolled in these classes and of this group, up to November 30, approximately 300 had been placed, most of them in the aircraft industry.

The national emergency has placed a heavy responsibility upon our public schools and almost overnight this responsibility has been assumed willingly, efficiently and wholeheartedly. Every effort is being exerted to meet each changing requirement and emergency. The schools of Los Angeles will continue to participate in meeting this national emergency, to the end that the government of the United States may be defended.

Industry's Man

Above, planning for construction: As the ability to make drawings and to read them is a fundamental skill in trades and industry, it is a basic course at West Technical High School, Cleveland. Below, woodworking: Pupils routing out a design at West Allis, Wis.

Above: All aspects of the printing trade are taught senior high school pupils at West Tech, Cleveland. Below: The man from Mars, ironically enough, is a participant in the national defense training program in the industrial Kanawha Valley of West Virginia.

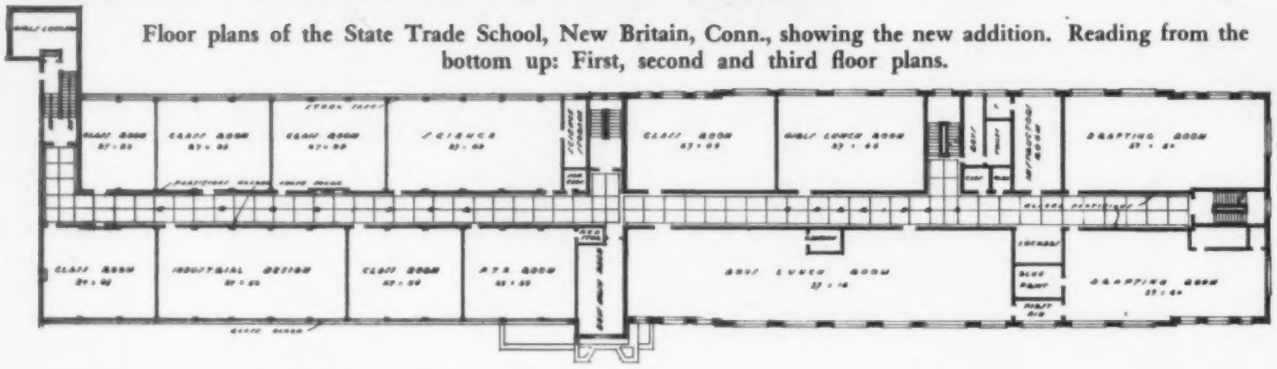
Power in the Making

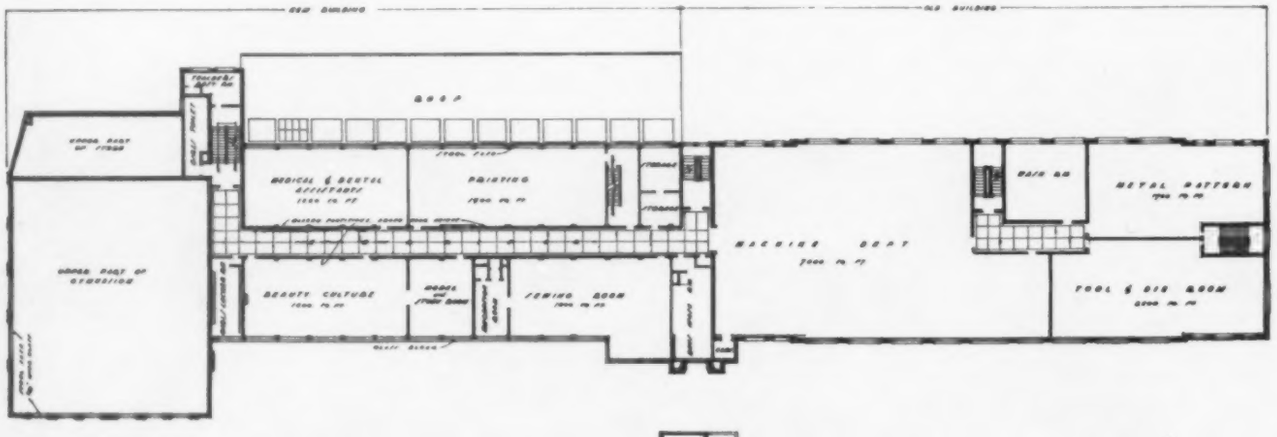
Sheet metal and electrical work are other phases of the national defense training program in the Kanawha Valley. Below: St. Louis aircraft shop.

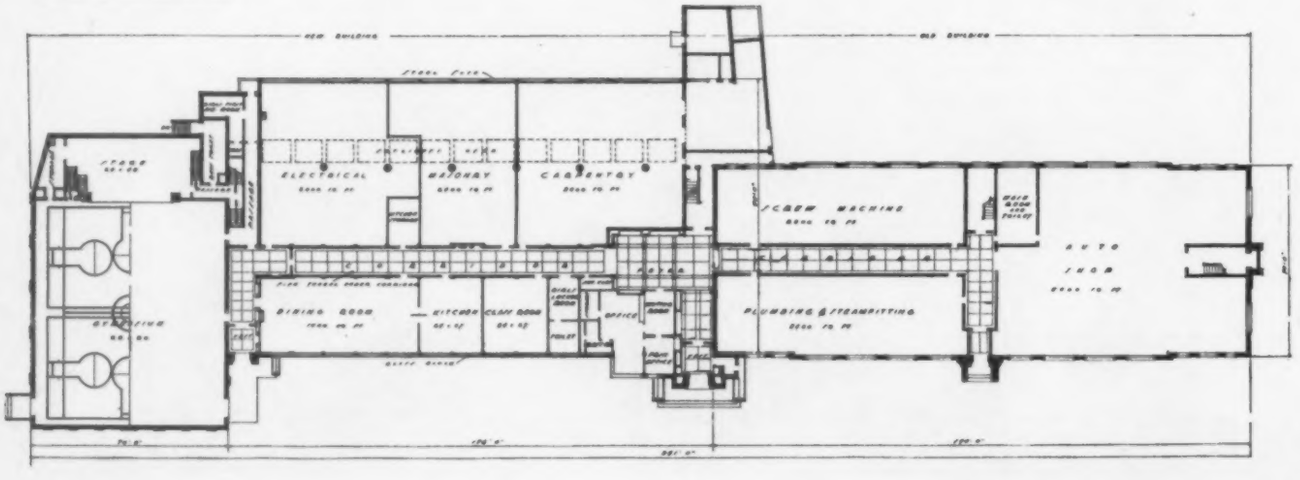
Good Design Is a Function

JUST twenty-nine years after New Britain had pioneered trade education in Connecticut by opening the first trade school in the Corbin Brothers' factory, the city opened the doors of its expanded and modernized trade school in September 1939. In 1915, a separate vocational building constructed adjacent to the senior high school became definitely a local board of education project; by 1919 it was returned to joint state and

Floor plans of the State Trade School, New Britain, Conn., showing the new addition. Reading from the bottom up: First, second and third floor plans.







# of All Trade Work

CARLYLE C. RING
Superintendent, New Britain, Conn.

local control, under which it still remains.

In 1923, new quarters were built on the present site, as accommodations in the vocational building were required to care for the increased senior high school enrollment. It is to this building that a large, modern addition has been made, making the New Britain Trade School one of the most up to date in the East.

Under an agreement between city and state, New Britain is responsible for the erection and maintenance of the plant, and the state, with the aid of federal vocational funds, is responsible for equipping, staffing and operating the school. In 1938, the demand for additional trade school facilities had become so acute that the board of education commissioned the Warren S. Holmes Company, architects, to prepare plans for doubling the capacity of the building.

Carrying out these plans has made possible the introduction of the following new trades: beauty culture, food trades and sewing for girls; plumbing and heating and toolmaking and diemaking for boys. It has also provided the enlargement and improvement of the quarters of already established departments for boys, namely, architectural drafting, automobile repairing, automatic screw machine, carpentry, electrical work, machine shop, masonry, mechanical drafting, metal patternmaking and printing.

The new structure, modernistic in design, is constructed of reenforced concrete, brick and steel, with a maximum of light and permanency provided by glass blocks and large window areas. The completed building comprises 17 departmental shops, 17 classrooms and a combination gymnasium-auditorium, which provides for 650 pupils at one time.

The appropriation for the new addition, exclusive of equipment, was as follows: city of New Britain, $169,471.84; P.W.A., $130,050.00. The cost per cubic foot was approximately 30 cents.

The building's reenforced concrete skeleton is designed on the unit plan so that the size and shape of the rooms can be easily changed to accommodate changing requirements. Esthetic values have been incorporated in the plans to an unusual degree. Justification for this is found in the fact that good design is an important function of all trade work.

Thirty years' experience with trade school instruction has taught New Britain and the Connecticut State Trade School authorities that there is a great difference between operating a factory and teaching trade work. Neither teachers nor pupils can devote their energies to the task at hand when their voices are drowned out by the din of hammers and machines. The building, therefore, has soundproof partitions that can be moved without corresponding changes in heating, lighting and piping; acoustical treatment has been provided for the ceilings of many departments. Mechanical ventilation, temperature control and a locker system were included.

The state board of education has furnished the building with the most modern type of equipment obtainable. All work is done on a production basis. It is not unusual for the drafting, carpentry, masonry, electrical, and plumbing and heating departments to combine in bidding on the building of a residence and to cooperate in its construction.

The new addition was completed just in time to help with national defense training. The building is in use twenty-four hours a day, providing for three types of students: (1) youths who elect the usual day school trade courses; (2) men in industry who are taking evening extension work for advancement in the trades, and (3) an unskilled group for defense training picked by the employment bureau for a special 200 hour course preparatory to employment in defense industries. These persons are showing their seriousness of purpose by attending sessions beginning at 11 p.m. and continuing through the night until 7 a.m.

This school in a manufacturing community stands today as an important link in the defense program.

This busy machine shop is one of the trade school's 17 departments.

Qualifying Our City Boys

NOTEWORTHY for vocational education is the shift in emphasis from trade to industrial education that is attending the current national crisis. The rapid increase in the tempo of industrial production, accompanied by an urgent need for trained personnel, is the central motivating factor in establishing instructional programs designed to prepare workers for specific production jobs.

Until recently, vocational education programs have emphasized either trade and technical training or general mechanical adaptability. Trade and technical schools have supplied the former type of vocational preparation and the standard secondary school, through industrial arts courses, the latter. Responsible for emphasis in the past on craft preparation has been the high esteem in which the American public has held the trade.

However, technological changes have affected profoundly the volume and type of labor demanded in modern production. With the introduction of machinery and scientific job analysis the highly skilled workers are being displaced by the semi-skilled types of employes. Today the skilled worker, in terms of volume, represents a relatively small part of total industrial employment.

The current trend in vocational education thought and activity not only reflects the effect of machine technology on industrial production but also suggests a psychological change in public attitude toward the problem of preparing youth for employment. The conclusion seems warranted, therefore, that industrial education will be focused on the semi-skilled job rather than on the trade.

Fundamentally, a trade or craft is a complex assembly of manipulative processes and performances. It involves proficiency in a wide multitude and diversity of mechanical operations. The craftsman can perform all of them. He is competent in making mechanical adjustments ranging from the simplest to the most intricate in performance. In addition to motor dexterity, craftsmanship requires command of much technical knowledge which has direct application to mechanical production. For example, employment as a metal pattern maker requires an understanding of the properties and chemical composition of such materials as aluminum, iron, steel and copper.

Proficiency in interpreting ideas expressed in blueprints and diagrams is essential. But since the same patterns are not used over and over indefinitely, the difficulty of such performance appears evident. For modification, rather than crystallization, characterizes skilled work and conditions employment. Because novelty is prominent in such crafts as die designing, general mechanical adaptability becomes an imperative occupational qualification.

Another qualitative distinction of skilled work is its relationship to industrial management. Competent craftsmen are capable of directing their activities to a large degree.

Consider now the semiskilled worker. In sharp contrast to the comprehensiveness of the skilled worker, his job is specialized and limited in productive scope. The semiskill represents a specific, single pay roll job. Far from being an all round skilled craftsman, the semi-skilled worker operates only one machine or performs a single task in the plant.

Viewing the semiskill from the standpoint of industrial engineering, it is a creation of job analysis procedure. It is a refinement in the industrial process and represents a breakdown of the original crafts into separate units of productive efficiency.

Viewing the work of the semi-skilled from another angle they constitute the component elements of their respective crafts. Every specific job, while performing separate functions, stands in a definite relation to all the others in the craft. Drafting, for instance, delineates the operations of the die designer or pattern maker. Mastery of semiskills is cumulative in nature.

Examples of the kinds of semi-skills or specific occupations in which the present generation of secondary school pupils could profitably be given vocational training include lathe work, drill press operations, grind, milling and many others.

Machines — Men

West Tech, Cleveland

for Semiskilled Jobs

WALTER E. GLEASON
Division of Informational Service
Detroit Board of Education

The trades require a long-term program of preparation dependent chiefly on apprenticeship with trade and technical schools providing supplementary and related training. It is generally recognized, however, that the trades can profitably absorb only a minority of high school boys. Nevertheless, if we bear in mind that the semiskills are the basic ingredients of the trades, even craft candidates can benefit from training in semiskilled work. The craftsman needs competence in dozens of specific tasks and operations. Since the semiskilled jobs are the basic ingredients of the industrial productive process they properly belong in an industrial education program.

The type of training necessary for semiskilled employment is of short duration and intensive in nature. The length of training depends upon the requirements of a single pay roll job and varies from ten to twelve weeks' time. Training for specific jobs can profitably be made available to a wide number of youths because of the current shortage of labor in the semiskilled occupations. The rapid mechanization of the industrial process will increase the need for personnel trained in operating intricate machinery.

In initiating an industrial education program in a large city a careful survey of local industrial needs should be undertaken. This survey should be a continuing one in order to ensure that instruction will serve the vocational purpose for which it is designed.

The next step is to make an analysis of every specific job to discover the duties that the prospective employe should learn. The analysis should be made in terms of the productive situation, for a mere listing of activities would not provide an adequate basis for organizing a course of instruction.

The information yielded by the various analyses then should be organized into courses of instruction. The contents of every course of instruction will consist of the detailed operations involved in running a machine or in performing a task.

Denby High, Detroit

In setting up the program of industrial education, provision should be made for pupils to discover their individual abilities. Different levels of training should be provided that will enable every pupil to rise to his individual job calling.

The responsibility for devising and developing this type of vocational program must rest largely with the proper administrative official under whose direction the superintendent of the school system has placed it. However, it is vitally important to the progress of the program that close relationship with the local industrial community be continuously maintained.

Devising a practical industrial education program is a huge task and one of increasing size. Fact finding surveys must be made. Difficult problems of balancing various interests, of policy, of coordination with industrial activities, of placement of prospective employes and the like necessitate cooperative action.

The administrator in charge of the program has certain criteria supplied by the statutes of his state and by the administrative policies of the local school system but, with respect to many of these problems, he must depend for guidance upon supporting groups representing industry, labor and civic interests.

Basic assumption of this discussion is that the chief goal of an industrial education program is a dual one: (1) to supply the needs of industry for trained personnel, and (2) to improve the employability of youths by preparing them to fit those needs.

There is no intention of suggesting here that a generalized program of industrial training should not be encouraged. There is a growing disposition on the part of the general public toward greater stress on specific occupational adjustment. Common knowledge is the fact that the vast majority of young workers in large cities enter the employment world unprepared to fill any specific job. Thus, there is likely to be greater emphasis in the future on qualifying youths to fill a particular niche in commerce and industry to the end that they may be economically self-supporting.

A Small School Program

EDGAR M. FINCK

Supervising Principal, Dover Township Public Schools, Toms River, N. J.

"INDUSTRIAL education? Fine for a large high school or a wealthy district or a city system, but what can a small rural high school do?"

Dover Township High School, Toms River, N. J., is a small high school with 600 pupils in the four upper grades. It is a rural situation, Toms River being the county seat of Ocean County, 70 miles from New York and Philadelphia. There is not a factory within 20 miles. The nearest industrial center, Trenton, is 40 miles away. It is not a wealthy district. The chief sources of income are summer visitors and the poultry industry. The pupils live scattered over 200 square miles of poor land, coming to school each day over 22 bus routes. What sort of industrial education can be conducted in such a situation?

For boys we offer two strictly industrial courses, auto mechanics and carpentry. These are three year courses beginning in the tenth grade. In the ninth grade, boys who intend to enter vocational courses take English, mechanical drawing, manual training and an elective. The mechanical drawing classes meet five periods each week and divide the time equally between drawing and the reading of blueprints. The manual training classes meet ten periods each week, stressing shop practice and the use of common tools.

Four points distinguish the vocational courses:

1. Vocational classes require time. They meet for three clock hours each school day. This period includes related science and mathematics, taught by the shop teachers. The large amount of time is essential, if we are to reach our two ever present objectives: a marketable skill and a set of desirable work habits.

The boy must have more than a diploma; he must be able to say: "I can grind valves" or "I can operate a tractor" or "I can lay cement sidewalks."

The boy must know how to work without being watched; he must be honest, careful of employer's tools and of customer's property; he must be punctual, loyal, neat in person and in the work he does. To build these habits is a patience-exhausting and a time-consuming job. Of course, we do not succeed 100 per cent. Nevertheless, we never stop trying, because good work habits are essential to success.

2. We accept all comers in vocational classes. We do not set up a minimum I.Q. for admission. Many shop teachers, who realize that a modern motor is far more intricate and closely machined than a high grade watch, will be horrified. "It takes brains to understand the operation of an internal combustion motor."

True, there is no substitute for brains and the school cannot manufacture brains. Nevertheless, it is also true that in every garage, factory and service station there are jobs other than adjusting timing gears, jobs such as pumping gas, changing tires, washing and polishing cars, checking batteries and filling radiators. These are all jobs that a boy of low I.Q. can do, provided he has acquired skill to a marketable degree and desirable work habits.

3. The work of the vocational classes is highly diversified. Carpentry is really a misnomer. The course includes work in several building trades. Boat building, maintenance and repair are prominent. The boys also get extensive training in ordinary house wiring, concrete work and steamfitting, as well as general building construction and repair.

As an illustration, on the school property we have an old dwelling in which we teach home economics. Last fall the girls began redecorating. In the dining room the plaster fell. The carpentry boys took over. They studied the old plaster, considered costs and methods and, finally, replaced the plaster. The girls are doing the painting, papering and varnishing.

In auto mechanics the boys do a great deal of work with marine motors, tractors and farm equipment. They have some experience with Diesel engines, pumps and unit electric generating plants.

Three years ago two boys bought a racing craft which had been sub-

Marine conversion engine as it was delivered to the shop for overhauling.

merged in the bay for more than a month. The hull went to the carpentry shop, where planks and calking were renewed. The engine went into the auto mechanics shop where every nut and bolt came out. Worn and eroded parts were replaced and the entire job was reconditioned. The craft is still plowing up the waters of Barnegat Bay to the great delight and satisfaction of its owners. Incidentally, both boys have enlisted in the Army and are making rapid strides in a government aviation school. According to their own letters, this is due primarily to the training they received in these vocational classes.

The justification for this type of instruction is that in this rural area there are no factories into which we might feed boys. There is no need for specialists on a single machine. There is a need for boys with several skills and abilities.

4. We recognize that vocational training is not the only training one needs. National labor laws have reduced the working week to 40 hours, leaving 128 hours to be spent in some other way; roughly, one fourth for work and three fourths for other things. Clearly, it would be foolish to spend all the pupil's school time in adjusting him for one fourth of his life after leaving school. As stated, approximately half of the school day is given to vocational training, the other half, to English, American history, physical education and electives. We offer art, five days per week, with full diploma credit and, at the moment, one fourth of our 600 pupils are enrolled in art courses. We also offer three years of music on a similar basis.

Originally, we had only a college preparatory curriculum. We still have it, stronger than ever. One by-product of instituting a vocational program is this: Pupils who formerly took academic subjects, simply because there was nothing else for them to take, now enroll in other courses. Being freed from these uninterested pupils, classes in college preparatory subjects are smaller and achieve far better results.

But the backbone of the whole business is the vocational training. The pupils must leave us ready and willing to work, able to pay their own way and to earn their living.

Top: A real construction job gets under way. Center: Carpenters also are painters. Bottom: These boys own the midget racer that they are repairing.

Trends in Trade Education

(*Continued from page* 35)

or in days to come, to have trained himself once and for all in any occupation. Need for training is more and more becoming continuous in all occupations for those who wish to keep in occupational and economic adjustment.

Trade and industrial education is offered in trade schools, in technical schools, in trade departments in high schools and in plant schools. The money expended, when the training is under supervision of public school authorities, is made available by law through joint budgetary procedures of state, local and federal authorities. The federal vocational laws make funds available provided the instruction embraces real occupational needs and provided the teachers are experienced journeymen. The detail of this is involved and, therefore, should be left to other reading.

The modern trade school includes in its curriculum many offerings aside from shop subjects. The technical school has academic departments with classes in mathematics, science, English, music, art and physical education. One of the desired outcomes is the development of a well-balanced individual who possesses trade skill. Broad educational values are sought as well as the narrower occupational skills.

Common modern educational expressions heard among faculty members of a trade school refer to skill, readiness, cooperation, knowledge of materials, safety education, methodical procedure, how to think, persistence, contributions of science and guidance. A decade ago this would not have been true. There is a change from the concept of narrow skill to the broad educational concept. Trade education, therefore, has an exceedingly important and growing function in modern education.

Living in the community and participation in community affairs means for youth that it must have such education as will make it fit for a worthy place in the community scheme of things. This is an industrial world and trade and industrial education are necessary for many young people who wish to be socially useful and to live happily. Youth knows this and demands more opportunities for vocational education of all kinds.

People today desire many modern gadgets. There must be continued improvement and expert workmanship in the manufacture of these gadgets and trained men and women are needed for the task in increasing numbers. Most of them must be trained, and from where will the training come if not from the schools?

Is there instructional matter in a trade? This is an important question because it determines whether there is a worthy and continuing place in the schools for trade education. Frequently, the expression "work with the hands" is heard in a manner suggesting that training is unnecessary, that mere practice is sufficient to qualify. Let us consider this.

In all creative work in the world, in work in which human difficulties must be overcome, there is a parallel in problem solving procedures to that of mathematics. The lawyer, surgeon, dentist and sculptor are problem solvers. They must combine essential elements in various ways to solve human problems. The skilled mechanic is also a problem solver; he must combine essential elements to create new things. These essential elements are operations that involve shaping and forming of materials, assembling of parts and depicting. There are knowledges of technical nature, such as mathematics, science and safety principles, and these must be integrated with the work. Shop work forms live, practical applications for these subjects. The projects or articles produced, usually called jobs, are analogous to the problems of mathematics.

The learner in an industrial occupation must be formally instructed in essential elements for three reasons. There is a safe and economical way in terms of material and an economical way in terms of time in performing every essential element. The instructor of shop work must be as fully in command of the various detailed operations and technical knowledges as must an instructor of mathematics. He, likewise, must be a good teacher.

The good trade teacher of today recognizes that his pupils are not unlike other pupils in their general learning processes. The psychology of learning used by the trade teacher is the psychology of every man in every branch of education. The successful industrial teacher knows that many things have relationship to teaching success. Trade ability alone is not enough. He teaches according to aims, selects subject matter according to aims and measures results. Teaching a trade is difficult because it involves materials, some of them complex in nature, and many kinds of technical knowledge.

With the increasing demands for industrial training, there have come improvements in its curricular phases and in teaching. The past few years have witnessed public demand for all kinds of education that will increase chances for occupational security; industrial education is striving to meet these demands by making the offerings more effective, through new curricular technics and through the study of teaching problems. The outlook in demand and in service is good.

Let's View It Broadly

(*Continued from page* 34)

of local administration. In other states, the need may be met by increasing the physical facilities and the personnel in existing plants. In addition, many more vocational shops and laboratories will be needed.

In the development of a vocational program the school must take great care to recognize its limited responsibility and competence; it must avoid costly mistakes through following the whims of individuals or of professional organizations. Continuing effort should be made by each state to have the administrative control now exercised by a remote Washington bureau returned to the states to ensure flexibility of program and easy adjustment to community needs. Vocational education should be administered in harmony with the American tradition of community competence instead of being straitjacketed by a small but powerful clique of narrow vocationalists.

Superintendents' Certificates

CLARENCE CARL MOORE
Superintendent, Gill, Colo.

CERTIFICATES of some kind have been required of the classroom teacher since the beginning of the public school system in the United States.[1] The definiteness with which these laws, rules and regulations have declared what the preparation of the classroom teacher should be has constantly and gradually increased.

Thus, it has compelled the teacher to master certain subdivisions of subject matter and to develop superior methods and technics of teaching in a more comprehensible manner. Not only must she be able to teach fundamentals of factual materials but she must also develop skills, attitudes and ideals concerning the profession of teaching.

However, it has not been until recent years that the superintendent has been able to obtain recognition from state certifying authorities concerning what might be the proper preparation for his work. Recognition was desired only by those superintendents who were progressive enough to obtain a preparation in educational administration. Only in recent years has preparation in educational administration been recognized by state departments of education as superior to just any extensive collegiate preparation for educational work or for classroom teaching.

Various states have been active in formulating policies and making requirements concerning the certification of school superintendents. This action resulted in the formation of rules, regulations and laws concerning certification which may be a decided advantage to superintendents who are specifically prepared in administration. It also should be of much greater advantage to the public in eliminating undesirable candidates who have no preparation in educational administration or supervision. This is a particularly good advantage in those situations in which candidates exert an undue amount of political pressure in order to obtain an administrative position for which they are unprepared. It is merely a repetition of the struggle for any kind of certification.

The policies and statutes of every state were analyzed recently in order to determine the general requirements of the different states with respect to the certification of superintendents of schools. Since this study was concerned with the status of certificates for superintendents, no attempt was made to determine the requirements concerning other administrative and supervisory officials except in those instances in which some ruling was made that indirectly affected the superintendent.

Table 1 gives the tabulated summary of the results concerned with this analysis.

There are 36 states in which the rules and regulations either require a special certificate of superintendents or offer one that he may obtain. This number of states is 75 per cent of the 48 states. This special certificate differs from that required of the regular classroom teacher. Twelve states have no special certificate for superintendents at the present time. The classroom teacher's certificate is a blanket covering for all teaching, administrative and supervisory positions within these 12 states.

The states that have formulated rules and regulations concerning administrative certificates are: Alabama, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia and Wyoming.

The states that permit the classroom teacher's certificate to be used as a blanket covering for all administrative and teaching positions are: Colorado, Idaho, Kansas, Louisiana, Michigan, Montana, Nevada, North Dakota, Oklahoma, Tennessee, Texas and Wisconsin.

In making a study of the conditions concerning certificates for superintendents in 1936[2] it was found that only 29[3] states required or offered a certificate for superintendents which differed from the requirement for a classroom teacher's certificate. The seven states that have formulated the requirements for administrative certificates since that time are: Florida, Georgia, Nebraska, New Hampshire, New Jersey, Oregon and Washington.

[1]Based upon C. C. Moore's Evaluation of the Curriculum Offered School Superintendents by Institutions of Higher Learning, Chapter XII. Unpublished Doctor's Field Study, Colorado State College of Education, 1940.

[2]Moore, C. C.: Certificates for Superintendents, A.S.B.J. **94**:58 (March) 1937.

[3]Moore, C. C.: The Educational Administrator and His Opportunities, Ed. Admin. and Supervision **23**:622 (Nov.) 1937.

Table 1—Status of Certificates for Superintendents in United States

Specifications	*Number*	*Per Cent*
Certificate differs from classroom teachers' certificates	36	75.0
No special certificate to superintendents; teacher's certificate is blanket covering	12	25.0
Certain number of credits in educational administration required in addition to teacher's certificate	23	47.8
Certain number of credits in education required in addition to teacher's certificate	25	52.1
Certain number of years of experience as teacher required	25	52.1
Certain amount of educational experience required in addition to classroom teaching	11	22.9
Different levels or grades of administrative certificates issued	11	22.9
Five years' college work required for the highest certificate	23	47.8
No administrative certificate required by the state department; state accrediting agency sets standard for high school principals in the schools accredited by it	11	22.9

A general characteristic of the states, with regard to the inauguration of an administrative certificate, has been to proceed cautiously as far as requirements are concerned. A few of them have certificates that differ so slightly in the stipulated requirements for classroom teachers' certificates that it would probably have been better not to have offered them at all as special certificates. However, such an offering constitutes a preliminary step in the right direction.

Only 23, or 47.8 per cent, of the states specify that the administrative certificate shall be granted with a certain amount of credit in educational administration as a basic requirement. There are 25 states, or 52.1 per cent of entire group, that have additional requirements of credit in education for superintendents' certificates over the requirements specified for the classroom teacher's certificate.

A specified amount of experience as a classroom teacher is a requirement for the administrative certificate of superintendents in 25 states. Educational experience in administrative work, such as a high school or elementary school principalship, is required in 11 states. There are different levels or grades of superintendents' administrative certificates issued in 11 states as a prerequisite to the superintendent's certificate.

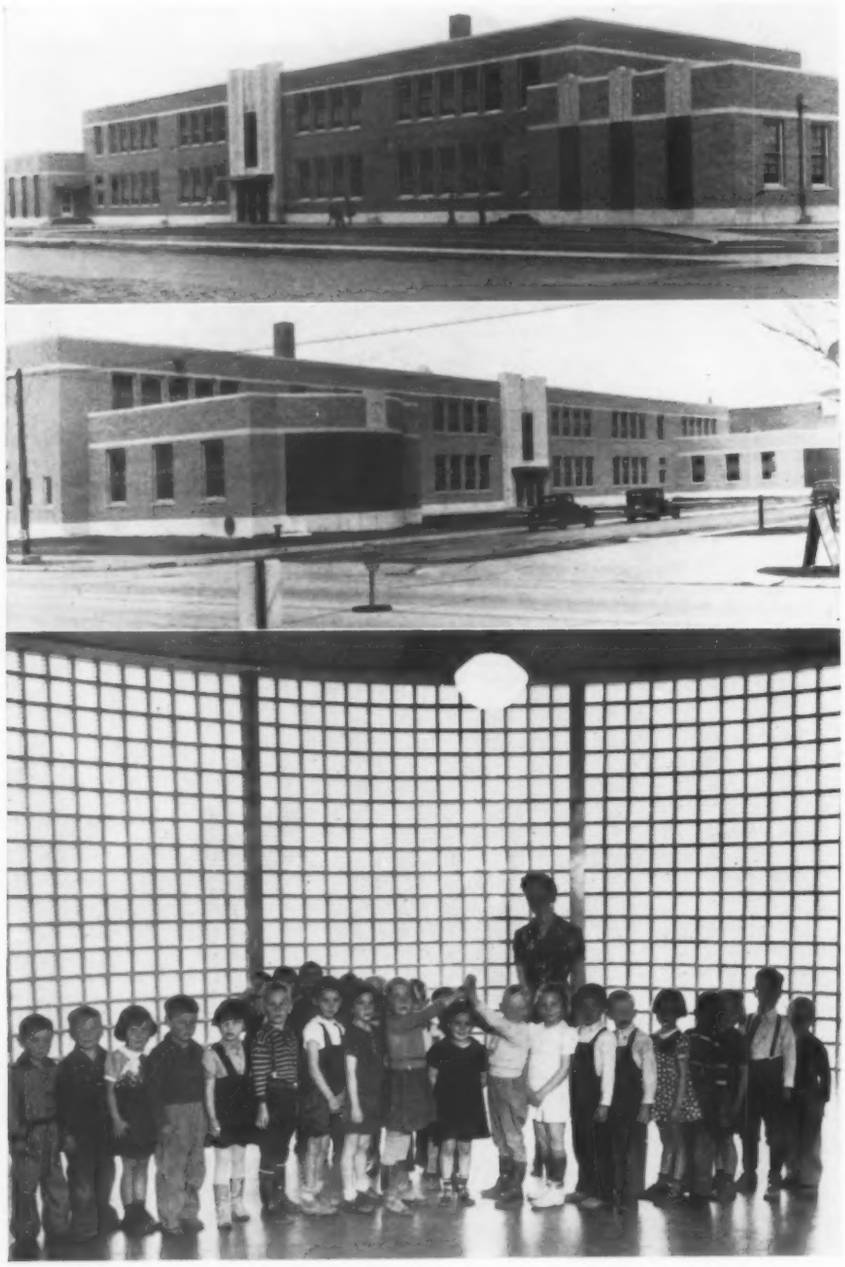
There is no administrative certificate required or recommended by the state department in 11 states. In this group of states the only recommendations concerning the preparation of the superintendent are through the accrediting agency which is not a part of the state department. In several of these states the recommendations of the accrediting agency apply only to the high school principal.

A study of the printed material on certification from state departments suggests that the requirements of certain states are set up as blinds for the purpose of preventing outsiders from entering those states for the purpose of administering schools within those states. At least these states make a heavy penalty of time by requiring experience within the state or prescribed courses of study in an educational institution within that state. In certain of these states these penalties of time in experience within the state or the penalty of educational preparation within the state are so severe that a progressive superintendent will not care to enter.

The New Mexico state requirements may be cited as a good example of what ought not to be done,[4] and the Connecticut state requirements may be cited as a good example of a simple and effective method of providing for certification.[5]

Certificates should not be designed to curtail the rights and the privileges of anyone. They should be based solely upon merit.

Scottsbluff Elementary Schools



A $387,000 building program has just been completed at Scottsbluff, Neb. Top: The Longfellow School houses an enrollment of 530 from kindergarten to grade 6. It has 16 classrooms. Center: Theodore Roosevelt School is identical to the Longfellow building except that it has 24 classrooms and 600 pupils. Bottom: Kindergarten bay window is of glass brick construction.

[4]Rodgers, H. R.: Rules and Regulations Governing the Certification of Teachers in New Mexico, State Board of Education, Santa Fe, N. M., Sept. 1, 1937.

[5]Butterworth, J. E.: Rules and Regulations Governing the Certification of Teachers in Connecticut, State Board of Education, Hartford, Conn.

Physical Education for Life

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IN THE last twenty-five years there has been a marked change in the nature of physical education in the schools. Prior to the World War, the program was characterized by the inclusion of a variety of activities, both formal and informal in nature.

With the increase in play facilities and with new emphasis on the intelligent use of increasing leisure, it was natural that a new emphasis on games and sports as recreational activities should occur. Such an emphasis not only occurred but became so strong that in many schools the formal activities, marching, calisthenics and gymnastics, were removed entirely from the array of activities which were taught in the gymnasium and on the playground. In more recent years it has been evident to many that the pendulum has swung too far, that there are many values accruing from gymnastic activities that are not outcomes of participation in games and sports. I propose to present a program outline which will emphasize a well-rounded program of physical education, with proper emphasis on all activities.

Biological Values Come First

While the recreational aspects of physical education are important, it is my contention that the biological values in physical education are of paramount significance. It is necessary, therefore, to set forth a few major objectives which we in physical education hope to attain: (1) the maintenance, improvement and greater appreciation of good health and well-being; (2) an optimum growth and development for each individual, and (3) a greater appreciation and intelligent use of physical education activities adapted to individual needs to delay the aging process.

In order to realize the third objective, it is obvious that the first two are of primary importance. While the recreational type of activity may be stressed in adult life, it does not follow that the school programs in physical education should be characterized solely by their recreational content. In order to attain the first two objectives, it is essential that physical education in the schools place more stress on the teaching of fundamentals in a variety of useful activities.

Let us consider briefly some of the means by which these three major objectives may be reached. The maintenance, improvement and greater appreciation of good health and well-being are attained not only through physical activity but also by the observance of proper health habits, by the avoidance of infection and by the control of certain environmental factors. Especially where optimum body functioning is concerned, the acquisition of health habits is facilitated by consistent physical activity in accordance with the specific nature and needs of the individual.

No program of exercise is of much health value unless persistently indulged in the year round and throughout the lifetime of the individual. Much has been said and written to stimulate interest in "Sports for All" with the result that physical exercise is taken only spasmodically when such games and sports are in season. Such limited participation in games and sports can be considered of recreational value only. It seems desirable, then, that the individual child or adult should be made familiar with a variable group of activities to enable him to carry on throughout the year and throughout his life.

Gymnastics Complement Athletics

The second objective, an optimum growth and development for each individual, pertains to the improvement not only of the muscular system but of the organic functioning of the body as well. Its importance has been frequently overlooked and misunderstood because of fantastic ideas regarding the efficiency and capacity of the human body from an anatomic and physiologic standpoint. For instance, many do not realize that athletic and gymnastic coordinations complement one another and are not antagonistic. Experience has shown that many expert athletes in football, basketball, baseball and track are excellent performers in gymnastics. Basketball offers only limited development of the arms, shoulders and chest, it being primarily a developer of the legs. Exceptional physiques of athletes participating in the major sports are not the results of the effects of these activities; these men are selected by athletic coaches because of their hereditary build.

On the average, only 20 per cent of all boys could be included in this athletic group; the remainder need special attention and teaching to promote a symmetrical development of arms, chest, shoulders and trunk. Exercise on gymnastic apparatus offers great opportunity for development. Of course, instruction in gymnastics must be intelligent, safe and progressive in nature. The Greek ideal—a harmonious bodily mechanism—is of great importance and should be the real goal for which to strive in planning a well-balanced program in physical education.

Best Time for Development

The junior and senior high school period offers the most favorable time for the progressive physical development of the pupil. It seems unfortunate, therefore, that in many high schools today the requirement in physical education is discontinued after the second year, just when desirable results can be realized best.

A well-rounded activities program in the junior and senior high school would include: (1) class activities; (2) corrective activities; (3) intramural athletics, and (4) specialized or interscholastic athletics. All pupils should engage in the class activities that are primarily instructional and planned to attain optimum growth and development. It seems unnecessary to cater entirely to the whims of every individual in the group. If we are to evaluate the effects of various activities on the growth and development of the individual, the following aspects should be consid-

Values of Class Activities on Basis of Requirements in Growth and Development

Activities	Anatomic Muscular Development: Arms, Chest, Trunk	Anatomic Muscular Development: Legs	Physiologic: Heart and Lungs	Corrective: Good Body Mechanics	Coordination or Skill: Leg Speed	Coordination or Skill: Arm Strength	Coordination or Skill: Endurance	Educational: Mental Alert Precis.	Educational: Moral Order Obey Rules	Social
Marching	..	S	S	E	..	..	..	E	E	M
Calisthenics	M	M	M	E	M	S	M	E	E	S
Gymnastics	E	M	M	E	M	E	C	E	E	S
Apparatus and tumbling										
Athletics	M	E	C to E	M	E	M	C to E	E	E	E
Track and field										
Games and contests										

Degree of Effect: S—Slight; M—Moderate; C—Considerable; E—Extreme.

ered: (1) anatomical, as related to muscular development; (2) physiologic, stimulation of the internal organs, including the respiratory and circulatory systems; (3) corrective, the use of good body mechanics; (4) coordinative, the acquisition of both gymnastic and athletic skill, including speed, strength and endurance, and (5) mental, moral and social, desirable concomitant qualities of the physical education program.

A comprehensive activities program should be planned to result in uniform growth and development, each type of activity being selected in terms of some qualitative effect to warrant its use. It can be noted here that practically all activities have some carry-over value in later life.

The most important feature in the planning of a physical education program to bring about desirable developmental effects is the intelligent use of the activities presented in the accompanying chart. The physical education teacher, presented with a group of boys of whom 80 per cent have a considerably superior leg development as compared with the development of arms, chest, shoulder and trunk (probably due to overindulgence in games alone during the elementary school period), must use, in part at least, the gymnastic types of activities during the entire year if the objectives in growth and development are to be attained. This is at variance with the majority of school programs today in which gymnastic activities, if used at all, are presented only during the winter season. If they are used during a portion of the year only, limited change is effected in the large musculature of the upper extremities and trunk (as witnessed in the examination of incoming freshmen in colleges). Large classes and lack of equipment may make an ideal comprehensive program somewhat difficult to carry out; nevertheless, a continuous effort should be made to increase the time spent in gymnastics.

Class periods should consist of at least forty-five minutes of actual activity, four times each week. On the basis of this time allotment, marching should take from five to eight minutes; calisthenics should not consume more than ten minutes; gymnastics and athletics should be allowed thirty minutes and should be taught in groups not exceeding 15 or 20 pupils. These two types of activity, gymnastics and athletics, require detailed coaching and teaching because they involve considerable coordination; therefore, they necessitate the majority of time being devoted to them. In the noncoaching types of sports, only five minutes of each period is recommended. For the sake of variety, marching and calisthenics are not given in every lesson. Gymnastics and athletics are used in every period.

The basis of the corrective activities program is the school health examination in which physical defects are detected. The detection and correction of defects are necessary early in school life when the majority of abnormalities respond readily and adequately to treatment. Obviously, the earlier organic abnormalities are discovered, the better the prognosis.

Intramural athletics should receive proper emphasis in both the junior and senior high schools. The program is in most schools extracurricular in nature and coaching, if any, is modified.

Interscholastic athletics in the junior high school should be discouraged. A limited number of games may be arranged; an extensive schedule should never be permitted. In the senior high school some restriction also is necessary, particularly in respect to the number of games played and the extent of training. These activities to my mind are extracurricular; members of all teams should be required to attend the regular class periods.

Our third objective, a greater appreciation and intelligent use of physical education activities adapted to individual needs to delay the aging process, pertains primarily to the after-school or adult life of the individual. To keep physically fit is not merely advantageous for body functioning but also of economic value in keeping on the job; at the present time it is a patriotic duty.

Exercise is not a panacea for health. Recognizing that other principles of hygiene must be followed, exercise offers an excellent means of keeping the entire body in good functioning order and thus prevents fatigue which, in many instances, is one of the predisposing factors of infection. Physical activity at regular intervals helps one to retain the agility of youth, maintains strength of arms and legs and, what is more important in later life, promotes good organic tone of the heart and lungs. As we get older many types of activities must be modified.

A mixture of calisthenics, modified gymnastics and games is admirable. Care must be taken that the exercise period for adults has a stimulating, rather than a fatiguing effect. This entire program of delaying the aging process through use of the principles of hygiene, exercise and physical fitness demands regularity in its application for the best results and, if possible, should be made a hobby.

The important thing is a comprehensive program for physical education today. Gymnastics have an important and rightful place in an intelligently planned program if optimum biologic results are sought.

Should Teachers Have a Voice

in Naming Administrative Officials?

WILBUR E. MOSER

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A PERPLEXING question in the application of a democratic philosophy in school administration is the part that the teaching personnel should take in the selection or retention of administrative officers. There are those who feel that in order to apply the democratic tradition teachers should be given some voice in the selection of their leaders. At present legal requirements offer many barriers to the realization of this goal. If, however, the profession agrees that democratic participation is theoretically sound, then educators and the laity should be informed and educated in order to evolve a truly democratic selection and retention of educational leaders.

The following questions were asked some 850 teachers, administrators and university specialists. The teachers and administrators represented more than 100 secondary and elementary schools in California. The university specialists were selected from 24 institutions of higher learning in the United States.

"1. If there should be a vacancy in the superintendency of your schools should the teachers be given a voice in the selection of the new administrator?

"2. If there should be vacancy in the principalship of your school should the teachers be given a voice in the selection of the new principals?

"3. Should teachers be consulted in the selection and retention of supervisors, school nurses and librarians?"

Since all the secondary schools included in this survey, except those in several large cities, were union high schools, the chief administrative officer is the high school principal. In the elementary schools the chief administrative officer is the superintendent, whereas the building administrative officer is recognized as a principal.

High school and elementary teachers are almost evenly divided in favor of and in opposition to participation in the selection or retention of administrative officers. The only conclusive evidence is in the selection of supervisors, school nurses and librarians; 65 per cent of the elementary teachers favor such participation as contrasted to 35 per cent who vote "No." The high school teachers are about equally divided on this issue.

Administrators are definitely opposed to teacher participation in the selection of administrative officials; approximately 85 per cent disapprove of such participation. It is interesting to note that the elementary administrators give the greatest amount of support to the selection of supervisors, school nurses and librarians as do the elementary teachers; 39 per cent of the administrators favor such participation whereas 61 per cent do not.

Although approximately 65 per cent of the specialists approve of teacher participation in the selection or retention of administrative officers, the support is not as strong as is the opposition on the part of the administrators themselves. The ratio of support of the specialists is in an ascending order from the selection of a superintendent, 57 per cent; to the selection of the principal, 62 per cent; to the selection of supervisors, school nurses and librarians, 76 per cent.

The findings relative to this phase of a democratic administration are not conclusive either for or against teacher participation in the selection or retention of administrative officials. As one specialist reported: "I am theoretically in favor of a democratic procedure in the selection of all types of educators, yet I cannot bring myself to the point, at this time, arbitrarily to support such a program without some limitations."

If a democratic philosophy as a way of education is improved and developed then in due time this phase will be accomplished. Apparently the emphasis should be placed on teacher participation in the development and determination of the policies and practices of administrative functions. There is much to be accomplished in improving democratically the mechanical educative practices. Participation in the determination of the administrative personnel must wait for a later stage in this democratic development. A bare majority is not conclusive evidence to overthrow time-honored practices. Democracy must determine practices and policies by education and evolution.

Tabulation of Replies to Questionnaire Regarding Teacher Participation in the Selection of Administrative Officials

Types of School Officials Queried	*Selection of Superintendent*				*Selection of Principal*				*Selection of Supervisors, School Nurses and Librarians*			
	Yes		*No*		*Yes*		*No*		*Yes*		*No*	
	Number	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*	*Number*	*Per Cent*
High School Teachers	139	44.3	175	55.7	150	45.7	178	54.3	160	49.8	161	50.2
High School Administrators	2	7.4	25	92.6	6	18.2	27	81.8	5	16.7	25	83.3
Elementary Teachers	116	45.8	137	54.2	134	52.5	121	47.5	168	65.1	90	34.9
Elementary Administrators	4	11.8	30	88.2	12	30.8	27	69.2	15	38.5	24	61.5
University Specialists	12	57.1	9	42.9	13	61.9	8	38.1	16	76.2	5	23.8

Chalk Dust

February Valentines

Comes now the month of storm and stress,
Of mud and sleet and snow.
The boilers squeak, the school roofs leak,
The buses will not go.
Comes now the happiest of times
When hearts and flowers abound,
And valentines with lousy rhymes
Are handed round and round.

And so I grab the poet's pen to send a word of glee, a greeting to the valiant men who seek the presidency. I take my Unabridged in hand, mayhap, to give some cheer to those whose fame throughout the land has marked them out this year.

For out in old St. Louis
A Homer sings his song,
While Old Man Education
Rolls mightily along,
Rolls on so deep and quiet
Till victory is won;
A modern saga is the work
Of Homer Anderson.

And down in good old N'Awleens
Where perfume fills the air,
Where blooms the finest of cuisines,
There is no worry there.
And education learns to blend
With joy and fun each hour,
Thanks to that genial, loyal friend
And leader: Nickie Bauer.

While in the Old Dominion
Where languorous airs enthrall,
Alert and every ready
Stands Sidney Bartlett Hall.
Should counsel wise be needed,
Are battles to be won?
Who better can be heeded
Than Old Virginia's son?

Amid Seattle's rattle
Out in the Golden West,
Where modern laws of learning
Meet every standard test;
With smile that's always ready
With touch that's ever sure
There stands, both firm and steady,
Seattle's Worth McClure.

While on the pleasant Mohawk
With understanding poise,
A mighty force is working
For New York's girls and boys.
Yet modest, unassuming,
Progressive, up-to-date,
Schenectady's Pillsbury
Leads all the Empire State.

So hail the month of fearful gales, of rain and sleet and snow; it's to Atlantic City where all good schoolmen go; where pedagogs from every clime recite their learned chatter and hear a lot of wisdom fine which may (or may not) matter.

For once in all their cheerless ways, they ride while others walk; for once in all their silent days, they get a chance to talk. They ride the Boardwalk push-carts as their wisdom they expound. By gosh, it ain't the first time that they've been pushed around. They send some taffy to the kids (the Board and Mayor, too); for, without taffy, what in heck would superintendents do? For four good days they labor, they argue, gab and grouse; and does it really matter if the mountain yields a mouse?

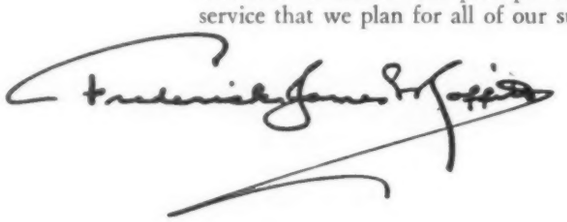
They rant and rave. They champ and chafe. They worry not at all. Methinks they know their cause is safe with Anderson or Hall. They know that education will gleam with added power and flourish through the nation with Pillsbury or Bauer. They recognize the world's secure with genial, smiling Worth McClure.

They come, they listen, they are gone,
And Education marches on.

● ●

Dear Superintendent

DEAR Superintendent: We strongly urge that the telephone in your office be replaced by a new instrument and also that an additional line be installed for your convenience. Our promotional department reports that on Monday your present line was continuously busy with one call lasting from 9 to 11 a.m., when it was reported out of order. Our repair man states that he found the telephone completely wrecked either by being violently dropped a successive number of times or else by being deliberately thrown and trampled upon by party or parties unknown. Will you give this matter your attention so that we may continue to render the prompt and efficient service that we plan for all of our subscribers?



Business Courses Multiply

HAMDEN L. FORKNER

Professor of Commercial Education
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THE rapid development of business education in the public secondary schools of this country since the World War represents a definite effort on the part of the schools to fit the curriculum to the needs of the large number of young people who have during the last twenty-five years continued their education beyond the period of elementary training.

With the high school enrollment increasing from some 200,000 in 1890 to more than 6,000,000 in 1940, the change in educational opportunities is largely in the nature of a more liberal offering, particularly subjects that will lead directly to employment upon graduation from the high school. Although many additions made to the curriculum are difficult to justify, nevertheless, business courses constitute one of the chief fields toward which a great many young people turn.

Whether or not this interest can be justified depends largely upon the extent to which the business courses fulfill the purposes of a sound educational program for youth. A sound educational program is one that, in addition to preparing young people for the various levels of occupational competence according to their abilities and the needs of the occupational world, prepares them to participate intelligently in the social and civic life of the community.

It is interesting to note that business courses first found their way into the American school through the elementary schools of the Colonial period. Such subjects as commercial arithmetic, bookkeeping and handwriting were given as preparatory to entrance upon apprenticeship in counting houses.

Advanced business training has started a new trend in public education which will undoubtedly have the effect of decreasing the amount of specialized training in the high schools and of transferring it to the junior colleges

During the same period there were private teachers and a few Colonial evening schools that offered preapprenticeship training. This type of training continued during the early period of national development and was the forerunner of the training for office work which was offered later in the academies and the business colleges.

The institution that had the greatest influence on public business education was that which was developed in the business colleges of the country. The first schools to be established specifically for the purpose of training young people for business pursuits were founded during the period 1824-27. The first business college advertisement of which we have any record is credited to James Gordon Bennett Sr., founder of the *New York Herald*. The advertisement appeared in October 1824. It announced such courses as geography, political economy and arithmetic bookkeeping for merchants' accounts for the instruction of young gentlemen who intended to follow mercantile pursuits. This venture was followed in the ensuing years with a large number of like schools.

Following the Civil War period and the expansion of industrial and commercial pursuits there came to be an increased demand for men in office work, which further stimulated the growth of private business schools in both number of schools and enrollments. As business and industry continued to expand, so the business colleges continued to exert an important influence in this area of education.

The effects of the business college on the regular high schools in the United States were not significant until the last quarter of the nineteenth century. By the end of 1900 a number of the public high schools of the country were offering specific business curriculums. For the most part these were definitely technical and were largely a duplication of the typical business college course.

Until 1914, when a large number of women began replacing men in

Table 1—Summary of Statistics of All Private Commercial and Business Schools Reporting, 1900-33*

	1900	*1905*	*1910*	*1915*	*1920*	*1925*	*1929*	*1933*
Number schools reporting	373	525	4	843	902	739	651	651
ENROLLMENT BY COURSES								
Bookkeeping or commercial course	50,382	72,805	47,703	60,801	106,852	41,717	35,383	16,535
Stenography and typewriting	34,505	65,370	44,868	72,362	126,055	71,173	61,226	28,372
Combined bookkeeping and stenography	—	—	17,720	38,291	53,430	31,669	30,389	17,843
Accounting	—	—	—	—	11,889	6,661	8,820	6,547
Business administration	—	—	—	—	—	—	5,673	4,500
Salesmanship	—	—	—	—	15,167	10,233	9,850	3,681
Secretarial	—	—	—	—	23,073	23,832	34,199	21,293
Teacher training	—	—	—	—	—	—	—	1,060
Machine operating	—	—	—	—	—	—	11,842	11,634
Totals	84,887	138,175	110,291	171,454	336,466	185,285	197,382	111,465

*From U. S. Department of the Interior, Biennial Survey of Education, 1932-34.

Table 2—Enrollment in Commercial Courses in Public Schools Since 1900*

Subject	*Number of Students* 1915	1922	1928	1934
Bookkeeping	39,816	270,517	309,138	442,938
Shorthand	—	191,901	251,631	404,237
Typewriting	—	281,524	439,379	749,315
Commercial Arithmetic	—	31,688	201,287	220,688
Commercial Law	—	19,611	76,434	144,342
Commercial Geography	—	36,616	140,246	178,408
Commercial History	—	8,307	5,321	8,614
Office Practice	—	7,721	40,848	72,072
Elementary Business Training	—	—	80,629	275,338
Total Students	39,816	847,885	1,550,913	2,495,952

*From U. S. Department of the Interior, Biennial Survey of Education, 1934-36, Vol. II.

office and store occupations, there was a gradual development of a business curriculum in the various communities. With the acceptance by the business and industrial world of women in offices and stores, however, there began to be felt in almost every community a demand for more and more training in business for both men and women, with the result that today in most states there is a larger enrollment in commercial subjects than in any other single field, with the exception of English.

Some indication of the rise and decline of enrollments in private business schools is shown in table 1.

It must be remembered, however, that many of the private schools do not render reports to the U. S. Office of Education and, consequently, these figures do not show a complete picture. It will be noticed, however, that in the case of bookkeeping there were 50,382 students enrolled in the private business schools in 1900 when 373 schools reported, as compared to only 16,535 when 651 schools reported, with a peak enrollment in 1920 of 106,852 when 902 schools reported. Similar comparisons can be made from the table for stenography and typewriting and other technical subjects.

The fact that the business schools began in 1920 to offer other fields of training makes the total enrollment somewhat more stable but even here it will be noted that the peak enrollment in all courses for the 902 schools that reported in 1920 was 336,466 students as compared to only 111,465 students enrolled for the 651 schools that reported in 1933.

Table 2, showing enrollment in commercial courses in public schools, indicates the startling growth during the period 1915-34.

Table 2 indicates that for 1915 there were 39,816 students enrolled in bookkeeping, whereas in 1934, 442,938 students were enrolled. Similar increases are noted in nearly every commercial subject for the years 1922-34.

That public school programs have had a definite effect upon private school enrollments is self-evident. Although the private business school will continue to fill an important need in the communities throughout the country for some time to come, there is evidence that it will probably play a less important rôle as public education on the junior college level becomes more fully developed and as the junior college comes to be accepted as a part of the public school program.

It is significant to note that as the high schools began to offer effective courses in business subjects, the business colleges sought new objectives. The most important change as a result of this movement was to discontinue their efforts to enroll young people who were not high school graduates. They have thus performed a remarkable service to education in general by providing this advanced type of training for store and office occupations for the large number of young people who during their high school courses did not acquire a high enough degree of skill to be able to market their services or who pursued a general high school course and needed additional specific training in order to make them employable.

The public junior college, however, presents a new challenge to the private business school. Apparently, the history of education will repeat itself within the next few years, except at a higher level, *i.e.* we may expect a rapid development of technical business training on the junior college level as a part of public education, with a decreasing enrollment in the private business schools, just as was the case in the regular high schools.

As further evidence of the growth of the junior college, the U. S. Office of Education reports that in 1919 there were 105 junior colleges listed. The 1936 survey of junior colleges shows 554 junior colleges, of which 190 are publicly controlled, with an enrollment of more than 100,000 students.

The enrollments in the junior colleges of California indicate to some extent what the trend is in a state in which the junior college is supported as a part of the state school system and what may be expected as other states develop public junior college programs.

"Of the 31,641 regular students reported by the 35 public junior colleges, a quarter were training for business.

"There were 14,645 students enrolled in completion or semiprofessional curriculums, or 46.3 per cent of the whole number. Preparation for business engaged two out of five

Table 3—Enrollments in Business Curriculums of 35 of the 42 California Public Junior Colleges, March 1939*

Semiprofessional Courses (Two Year Terminal)	*No. of Full-Time Students*	*Percentage of Total Enrollment*	*Percentage of Enrollment in Semiprofessional Curriculum*
Secretarial Training	2,877	9.1	19.6
Business, General	2,018	6.4	13.8
Bookkeeping, Accounting	771	2.4	5.3
Merchandising	429	1.4	2.9
Hotel Management	49	.2	.3
Total Semiprofessional Business Curriculums	6,144	19.5	41.9
Total Junior College Enrollment	31,641		
Number Enrolled in All Semiprofessional Curriculums	14,645	46.3	

*From an article by Frank B. Lindsay, published in "California Schools," December, 1939.

students with semiprofessional programs. Nearly one half of these were enrolled in secretarial training, almost four times the number in bookkeeping and accounting."

Table 3 shows the enrollments in the various fields of the business curriculum of the 35 California junior colleges that reported in March 1939.

It is safe to assume that if California had not provided the facilities for preprofessional training at public expense for these 6144 young people, a large number of them would have continued their business education in private business schools and the private school enrollment in California would have increased materially.

Thus, we see a new trend in public education which will undoubtedly have the effect of decreasing the amount of specialized training in the high school; it will increase junior college enrollments and decrease the enrollments of the high school graduates in the private business schools for additional training.

Whether or not the private business school will be replaced entirely depends to a large extent upon the aggressiveness of the junior colleges in developing satisfactory business contacts which will lead to effective placement of their graduates and whether or not the junior college sets up a flexible program of training which permits the absorption of the trainees into jobs as they are available instead of the almost universal practice of holding students until they have "completed" a specified curriculum and thus flooding the labor market twice a year with a large number of young people.

A Modified Platoon Plan

RAYMOND DONALD HURLBERT

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ORDINARILY, in the platoon system there are homeroom teachers, or teachers of the basic subjects, and special teachers who instruct in special topics, such as art and auditorium. This plan, as any other, has its price. Usually, homeroom teachers become acquainted with their particular section or sections and, except for these two groups, are isolated from the school as a whole. On the other hand, the special teaching staff is spread so thinly over the whole organization that the abilities and personalities of the teachers are taxed and dissipated. It is said that the changing of classes at regular intervals interferes with the best teaching procedures. It also has been said of the platoon plan that when certain activities are necessary, the schedule calls for other work, thus breaking the needed continuity. Frequently there should be more integration than is now afforded. A lack of enthusiasm on the teacher's part can also arise from too much routine. A question as to the relative responsibility and amount of work of special and of homeroom teachers is sometimes raised.

At Hemphill and Jackson schools, Birmingham, Ala., an effort has been made to adapt the platoon schedule to overcome the foregoing difficulties. The plan at present places each teacher in charge of a homeroom during the morning and of a special subject during the afternoon. This plan gives each teacher an opportunity to know one group intimately during the long period for homeroom work. During the afternoon she may become acquainted with and a part of the whole school organization. Rather than having the first homeroom period in session for an hour and a half in the morning, we hold each homeroom period for the first two and a half hours of each day. During this time when fundamental and basic studies require the closest attention, the building is kept quiet. There are now only a few primary sections moving through the halls during the forenoon. This unbroken period in the homeroom also lends itself to more progressive teaching and gets away from the enslavement to bells. Having special rooms, such as the auditorium and art room, free during this homeroom period lends itself to the activity type of teaching.

Following this morning period the next three hours of classroom time is given to special subjects. During this period, there are taught the same special subjects as it has been customary to include in the platoon schedule, for this field of teaching is one of the primary advantages of the platoon school. The last half hour of the day is spent back in the homeroom. This closing period with the homeroom teacher in itself has many advantages in tying up loose ends of the school day. The problem of lost garments and articles is also greatly reduced by this procedure at closing time.

The problem of integration of work always has confronted the platoon schools. The uninterrupted period in homerooms contributes a better basis for this type of work. The participation of each teacher in some special field naturally brings about a more intimate knowledge of possibilities for integration while, at the same time, the teacher's vision is being broadened by wider areas of work.

Special subjects are appreciated in platoon organizations for their genuine worth to the children even though this type of work does in some cases demand more preparation on the part of the teacher. One of the advantages of this new type of schedule is to distribute the teaching load more evenly. When a special subject exacts more than the average amount of work, more teachers are assigned to this topic. The combination of homeroom and special subjects equalizes teaching loads.

The real teacher will be challenged and stimulated in a new interest for her service. There is opportunity for revitalizing one's labor in having some special subject field in which to teach while continuing with the accustomed homeroom work. Likewise, when some special subject instructor has been dealing in a rapid-fire manner with a different section every thirty minutes, the steady type of homeroom procedures with no bell interruptions is a welcome change of pace.

The platoon plan is yet the most practical organization for elementary school work. In the foregoing adaptations, the advantages of the platoon plan have been retained while the schedule has been adjusted to care for a broader and more flexible teaching program.

Portrait of a Good Board Member

DENNIS H. COOKE and CON T. WELCH

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IN THE February 1938 issue of The NATION'S SCHOOLS a comprehensive and objectively determined rating scale for school board members was presented.[1] A report on the application of this scale to 101 county school board members in the Upper Cumberland section of Tennessee was made in the June 1938 issue.[2] This is a report on the use of this scale with 136 county school board members in the West Tennessee section of the state.

With one important exception the procedures in applying the scale and interpreting the results are essentially the same in the two studies. In the first study the highest 23 per cent of the scores on the scale were taken as representing the best group of board members and the remaining 77 per cent, as representing the rest of the group. The score value of the scale ranges from 0 to 1000 points. In this report, instead of considering the highest 23 or 25 per cent of the scores as representing the best board members, all scores of more than 750 points are used to indicate the best members. This group numbers 73 and the rest of the group, or all scores of 750 and below, numbers 60. Reference is made throughout this report to both studies. For the details of the rating scale and the specific procedures used in its application, reference should be made to the two earlier articles.

According to the most widely accepted administrative opinion, the best board members are obtained when boards of education are elected by popular vote. The board members under consideration in both of these studies were elected by popular vote or by the county court, which is selected by popular vote. Fifty-two per cent of the best board members in study 1 and 37 per cent in study 2 were selected by popular vote. The others were elected by the county court. It appears, therefore, that it makes little difference whether board members in these two sections of Tennessee are selected by popular vote or by the county court.

A term of three years is the minimum effective length of term according to the best administrative theory. In the first study 70 per cent of the best board members were elected for a term of two years, while the other 30 per cent were selected for terms of seven years each. In the second study 25 per cent had terms of two years each, 18 per cent had four years and 57 per cent had seven years. Study 1 shows that a two year term is probably better than a seven year one, while study 2 indicates that four and seven year terms are better than a two year term.

Without going into the argument pro and con, suffice it to say that a five member board, as a rule, is much to be preferred over a nine member board. Eighty-eight per cent of the best board members in study 1 are on five or seven member boards; 17 per cent are on nine member boards. Since all board members in study 2 are on seven member boards, it is impossible to make a comparison.

There is little relationship between the ages of board members and their ratings on the scale. The median ages of the best board members in studies 1 and 2 are 50.8 and 55.2, respectively, while those for the rest of the group are 50.9 and 54.1, respectively. The median age for the entire group in study 1 is 50.6 compared with a median of 54.3 in study 2. While 74 per cent of the best board members in study 1 fall in the age group of 35 to 55, almost 70 per cent of the best members in study 2 are between 45 and 65 years of age. There is no suggestion here that a member of a board of education must be between 35 and 65 years of age in order to be an effective member, but few of the best board members are outside of this age limit.

In table 1 are shown the occupations in which the board members in both studies are engaged.

The best board member is the parent of three children, while the less valuable board member has approximately four children. More than 70 per cent of the best board members in study 2 have three children or less, while 57 per cent of the rest of the group have three or less.

The best board members considered in study 1 have a median of 1.5 children in school, while the corresponding figure for study 2 is 1.1. The rest of the group has a median of 1.7 children in school in study 1

Table 1—Comparison of Best Board Members With the Remainder of Group in Regard to Occupation

	Percentage of					
	Best Members		*Rest of Members*		*Entire Group*	
Occupation	*Study 1*	*Study 2*	*Study 1*	*Study 2*	*Study 1*	*Study 2*
Agriculture	53	51	66	74	63	62
Proprietors	26	22	14	7	17	15
Professional Work	9	15	4	2	5	9
Clerical Work	4	.....	3	.....	3	.....
Managerial Service	.....	4	6	3	5	4
Manual Labor	.....	.....	1	.....	1	.....
Commercial Service	4	4	3	12	3	7
Domestic Work	4	4	3	.....	3	2
Unemployed	.....	.....	.....	2	.....	1
Total	100	100	100	100	100	100

[1]Cooke, Dennis H., and Cope, Quill E.: Rating School Board Members, The NATION'S SCHOOLS **21**:34 (Feb.) 1938.

[2]Cooke, Dennis H., and Cope, Quill E.: He Is a Good Board Member, The NATION'S SCHOOLS **21**:31 (June) 1938.

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and 1.3 in study 2. Seventy-three per cent of the best board members in study 2 have one or no children in school compared with 68 per cent for the rest of the group. At the same time 71 per cent of the entire group have one or no children in school. Fifty-two per cent of the best members have one or more children in school compared with 59 per cent of the rest of the group and 55 per cent of the entire group.

Thirty-nine per cent of the best board members in study 1 have had teaching experience compared with 24 per cent of the rest of the group. These figures seem to favor teaching experience for board members. On the other hand, 15 per cent of the best board members in study 2 have had teaching experience compared with 18 per cent of the rest of the group. Here the reverse is true, *i.e.* a smaller percentage of the best board members have had teaching experience.

The best board members in study 1 have served a median of 4.75 years on the board compared with a median of 3.5 years for the rest of the group. All the board members of study 1 have served a median of 3.8 years. The best board members in study 2 have served on the board for a median of eight years, while the rest of the group has served for a median of 4.7 years. The entire group has served for 5.9 years.

Long Tenure Is Valuable

Ninety per cent of the best board members in this study have been members of their respective boards for two years or more; 81 per cent, for four years or more, and 63 per cent, for seven years or more. Of the rest of the group, 93 per cent have been on the board for two years or more; 60 per cent, for four years or more, and 30 per cent, for seven years or more. These data are definitely indicative of the fact that the best board members have had longer tenure on their boards than the rest of the group have had. Of the best board members in study 2, 15 per cent have served fifteen years or more. Relatively long tenure on the school board adds to the value of the board member's service.

Slightly more than 52 per cent of the best board members in study 1 are members of various community and civic clubs, while slightly less than 30 per cent of the rest of the group maintain such membership. In study 2 slightly less than 55 per cent of the best board members are active in such organizations, while only 23 per cent of the rest of the group are engaged in the work of such organizations to any appreciable extent. The best county school board members are more active in civic and community organization than are the rest of the group.

Church Attendance Is a Factor

Sixty-nine per cent of the best board members, 40 per cent of the rest of the group and 55 per cent of the entire group of board members are frequent attendants at church, as revealed in study 2. Just what effect, if any, church attendance has upon the efficiency of a board member is not a question for this report. The evidence is unmistakable, however, that the best board members are more interested in church affairs, as evidenced by more frequent attendance, than are the rest of the group of board members.

Studies 1 and 2 show little relationship between the extent of the board member's interest and activity in politics and the value of his services as a board member. Study 2 shows little difference in the percentage of the best board members and the rest of the group with reference to "little interest" and "median interest" in politics. Approximately one tenth of the best board members and more than one fourth of the others are active in politics. These figures possibly indicate, however, that active participation in politics increases the board member's chances of being classified with the rest of the group instead of the best group.

According to study 1 the median income for the best board members is $1600. It is $760 for the rest of the group and $864 for the entire group. Comparable figures for study 2 show a median of $2000 for the best group, $1117 for the rest of the group and $1583 for the entire group.

The best board members have been more successful in accumulating property than have the rest of the group. According to study 1 the median value of the best board members' property is $4892 compared with $5407 in study 2. The median value of the property owned by the rest of the group is $2738 in study 1 and $3016 in study 2. Seventy-four per cent of the best board members in study 1 each have property valued at $2500 or more, while only 54 per cent of the rest of the group fall in this classification.

Among the best board members of study 2, 36 per cent have each accumulated property valued at $10,000 or more, while only 13 per cent of the rest of the group have acquired a like amount. Fifty-eight per cent of the best board members have accumulated $5000 worth of property or more, while only 25 per cent of the rest of the group have accumulated this much. It does not follow, however, that a man with a relatively small income and who has accumulated little, if any, property cannot be a good board member. But probably the conditions and abilities that make it possible for him to earn a relatively large income and accumulate some property are the same factors that make him an effective board member.

Broad Representation Needed

In a democratic society like ours the large group of people with rather limited formal education should have some representation on boards of education. Studies 1 and 2 show that the best board members have more education than the rest of the group. It was shown in study 1 that 96 per cent of the best board members have an eighth grade education or better, while only 68 per cent of the rest of the group reach this standard. Thirty-nine per cent of the best board members in study 1 and 56 per cent of them in study 2 have a high school education or better, while 15.4 and 28 per cent, respectively, of the rest of the group reach this level.

Approximately 10 per cent of the best board members in study 1 and 21 per cent of them in study 2 are college graduates, while only 1 per cent in study 1 and 2 per cent in study 2 have reached this level of education. Any man or woman who is to participate in such school responsibilities should, of course, be literate. Perhaps he should have a broad general education when such an education and the means of acquiring it are interpreted in the broadest possible sense.

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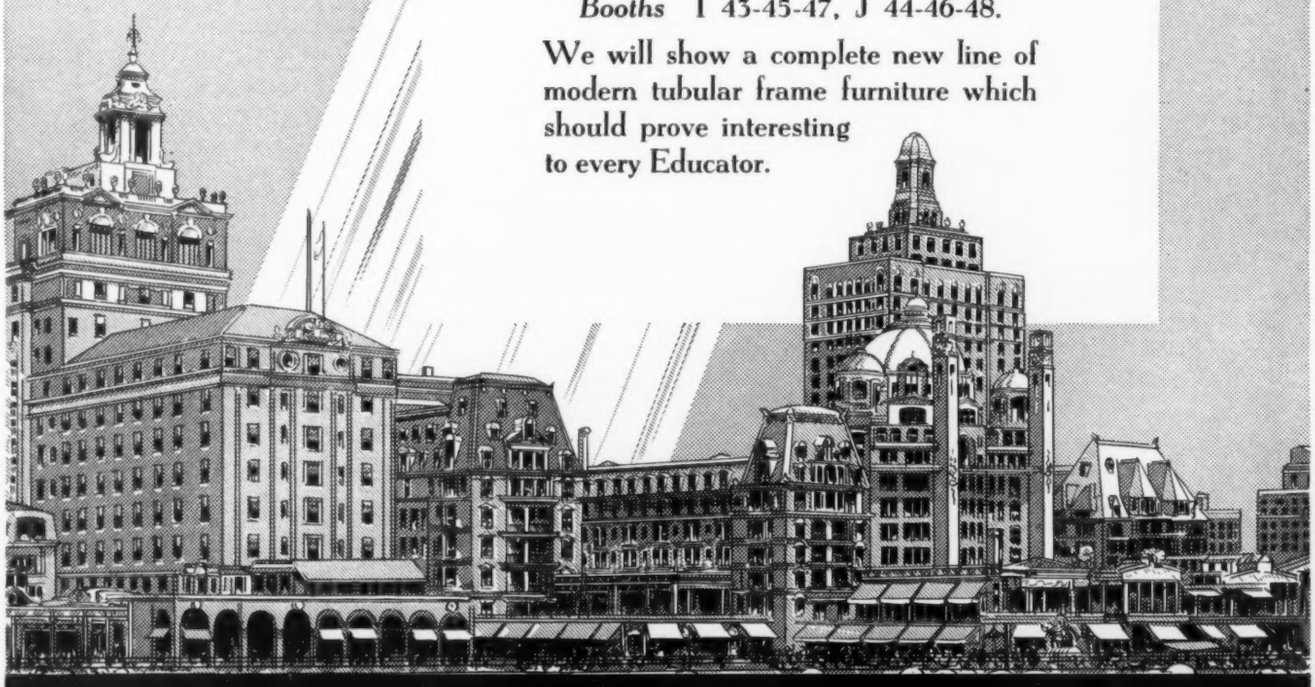

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Rural High Schools Fail

to Serve Many Needs of Negroes

T. S. JACKSON

Associate Professor of Education
Talladega College, Talladega, Ala.

The curriculum of small Negro high schools is too limited and unattractive to the boys and girls of high school age. The remedy for this condition rests primarily with teachers who can present the problems of these schools to the proper local administrative officials

THE small high school (200 population or less) is the home of most of the secondary school pupils of the United States and, as such, is a unique institution in the education of American youth. More than one half the population of the secondary schools of the country is found in the towns and villages. More than half of high school graduates do not enter higher schools after graduation but assume positions of various sorts in their local communities.

To make secure our democratic way of life is to assure the population of the small high schools a sound and pragmatic education. We must concern ourselves with the immediate as well as with the remote needs of these young people in towns, cities and the sparse rural sections of the United States. How to live every day and how to practice equality of opportunity in civic, economic, political, educational and religious aspects of American society are lessons as vital to the children in the wide open spaces of America as to the urban children.

Small High Schools Deficient

Among obstacles that the small high school must overcome if it is to be used as an instrument in the preservation of the democratic way of life are: (1) insecure tenure, (2) inefficient teachers and administrative officers, (3) low salaries, (4) limited and false objectives of education, (5) inadequate and insufficient equipment and materials, (6) poor attendance, (7) small teacher-pupil ratio, (8) influence of accrediting agencies upon graduation requirements and (9) inadequate curriculums.

This study concerns 15 small rural high schools of Talladega County, Alabama. All except one of the schools offer three years of work beyond the sixth grade; the other offers four years of training beyond the sixth grade.

The pupils of these schools come from a Negro population of 18,000. More than half of the families are farmers. Only 20 per cent of the farmers own their farms. Their average annual cash income in 1938 was $150.

Domestic service, farm labor, railroad and highway construction and the cotton mill industry are the other sources of income for the parents of children of the schools studied. Approximately 40 per cent of the parents depend upon these sources. The average annual income from these sources is $210.

Data for the study were collected through interviews with the principals of the schools, the supervisor of the county, the county superintendent and the county farm demonstrator. Questionnaires were sent to four of the schools. Data were received from all the small high schools of the county. Observations and interviews were held during the spring and fall of 1938 and the winter of 1939.

Objectives of all the 15 small high schools are preparation for senior high schools and colleges and for citizenship. Three schools gave more complete statements of objectives. Four schools did not report any objectives. The only four year high school of the county gave the following as its aims: (1) to instill in our pupils health ideals that will make them happy and efficient individuals; (2) to promote a scientific attitude toward agriculture and domestic science with the idea of enabling our boys and girls to take their places in this community; (3) to give a sense of responsibility in social and civic activities, and (4) to give a cultural outlook.

The subjects of the curriculum are: natural science, history, English, geography, general science, health, arithmetic, algebra, geometry and civics. (Negro history as a course is not offered in any of the schools.) Only three of the schools are attempting work in manual training, domestic science and agriculture.

All of the schools have some extra-curricular activities. Choral groups, basketball, Hi-Y clubs, Girl Reserves, tennis, 4-H clubs and dramatics are found. One school was attempting a "Posted" newspaper—posting the news on a bulletin board.

The average school enrollment was 30.9; the average daily attendance, 25, showing 80 per cent of enrollment. But the school census average for the 15 schools was only 62, showing more children of high school age not in school than enrolled. Apparently, the serious problem is to get children in school.

Only Small Number Graduated

Thirty-three of the graduates of these schools are continuing their education in senior high schools or colleges. The range is from 5 per cent to 90 per cent.

On an average 45 per cent of the pupils drop out before graduation. One school said, "Just about all of them drop out before graduation." Reasons given were: (1) poverty, (2) retardation, (3) lack of interest, (4) wish to marry, (5) wish to work, (6) too large and too old for class.

The average chronological age for these three year junior high schools was 17 years. The range of chronological ages was from 11 to 23 years. The number of days of school attend-

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ance for all the schools except one was 140. The exception was the county training school which holds session for 160 days.

The average number of years of preparation of teachers beyond standard high school was two. The average number of years of teaching experience was six. The teaching load averaged 10.7 different classes per day. In 5 of the 15 schools one teacher teaches all the high school subjects. The range was from 6 to 18 classes per day. The teacher-pupil ratio is 18 to 1. The average monthly salary of teachers is $60.59. In all of these Negro schools the library and scientific equipment is inadequate. In most of the schools pupils have no supplementary books and textbooks are scarce.

A typical criticism of these schools as expressed by the principals is: "We need better and more transportation, longer class periods, a longer school term, better and broader knowledge of the Negro race, more teachers, more classrooms, well-organized vocational work, organized play and more and better equipment."

This study may be summarized as follows:

1. Most of the schools do not have a comprehensive and clarified statement of their aims.

2. The curriculum is too limited and unattractive to the boys and girls of high school age. The emphasis upon the senior high school and college preparatory subjects is not justified in light of the number of dropouts. Eighty-two per cent of the dropouts and graduates remain in the community. Most of the pupils are not receiving an education to care for everyday living. Only 3 of the 15 schools are trying to adapt learning to practical needs. More than one half of the parents earn their living from the farm but only one school offers work in agriculture.

Lessons in marital relations through hygiene courses are reported by one third of the schools. According to the principals of these schools, this work needs reorganization. Teachers are too busy preparing the children for senior high school and college to teach the problems of marriage, pregnancy and illegitimate children. In some cases the teachers believe that discussions on these topics have no place in the classroom.

3. The teaching load is too heavy and the salary of teachers is too low to expect teachers to do a decent job of preparing pupils for higher schools, let alone for enjoyable living in the community.

4. With the large number of children of school age not in school and with the short term for those who are enrolled one must expect an increasing amount of delinquency, ignorance and crime.

The following recommendations are offered:

The schools should continue their program of raising funds to purchase school equipment. They should encourage teachers to continue their preparation through extension work, summer schools and institutes.

The teachers of the county should organize and should appoint a standing committee to present the true conditions of the schools to the superintendent and county board of education. This organization of teachers should request: (1) salaries according to the state scale; (2) more and better equipment for classroom work and playground activities; (3) shop work, domestic science, agricultural courses, public school music for all schools, and (4) more combinations of subjects now offered.

Latin, Living Not Dead

REBEKAH K. TRUXAL
Teacher of Latin, Somerset, Pa.

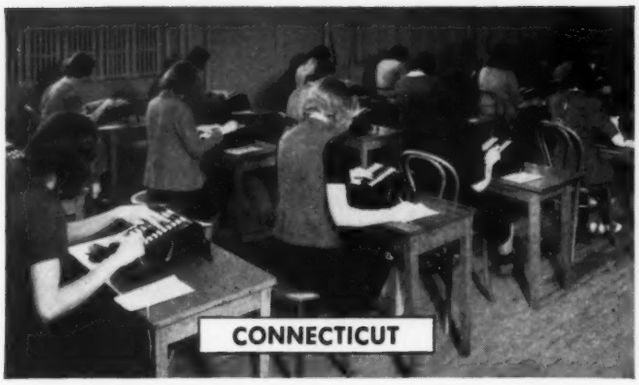
As a teacher of Latin in the schools of Somerset, Pa., I realize the tiresome methods of acquiring a knowledge of this difficult subject. Day by day, declensions must be learned, uninteresting sentences must be studied and words without end must be memorized. To this tiresome drill, which is necessary to acquire knowledge of an ancient language, I have added extracurricular activities, in order that there may be a full recognition of the personality of the pupil and opportunities for self-promotion of his own needs and desires, his knowledge and his social attitudes. Through practice and procedure, I have tried to establish an understanding of the pupil's own power and limitations, of his cooperation and respect, of his individual rights.

A Latin banquet, prepared, directed and executed by the pupils grants a wholesome respect for each one's rights and opinions and develops correct social attitudes and social responsibilities. As dignified patricians recline upon their couches as the Pontifex Maximus invokes the blessings of the gods, and as the slaves in quiet procession carry the platters of roast pig to the tables, the spirit of Rome truly prevails. Great is the excitement as slaves rush hither and thither obeying the rules of their masters and entertaining with song and dance. The hall rings with laughter. The banquet comes to an end and ancient Rome withdraws once more to the archives of history.

Each pupil should have adequate opportunities offered for the self-promotion of his own needs and desires as evidenced in his skills. To this end an opportunity is given to each boy and girl to create from his storehouse of knowledge an exhibit relative to Roman life and customs. After much discussion, debate and research, articles characteristic to Roman life are presented by the different pupils during National Education Week.

Roman life in its entirety may be seen. Implements of war, such as catapults, battering rams, ships, javelins, towers and slings, are interspersed with the beauty and grace of the Roman temples, gardens and homes, along with the memorial arches and several types of bridges over which Caesar led his troops into Germany.

Soap, wax, paraffin and wood have been mysteriously turned into Roman life, living not dead. This exhibit is on display in the classroom for many weeks. It fills the room with the spirit of ancient Rome, its grandeur and culture, and adds incentive to the study of Latin. It is admired and inspected by many patrons of the school. The exhibit is original, it is simple in its character, it does not involve expenditure of money and it is neat, artistic and instructive for the Latin pupils.



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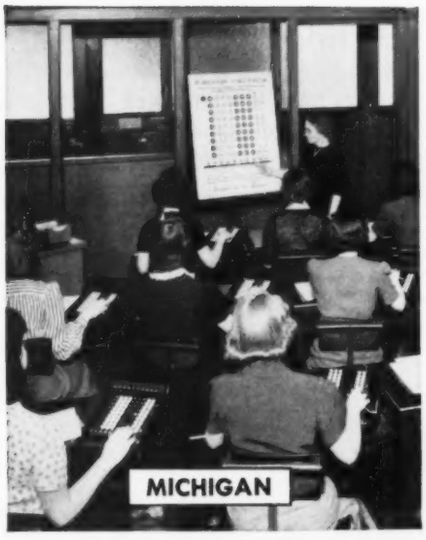

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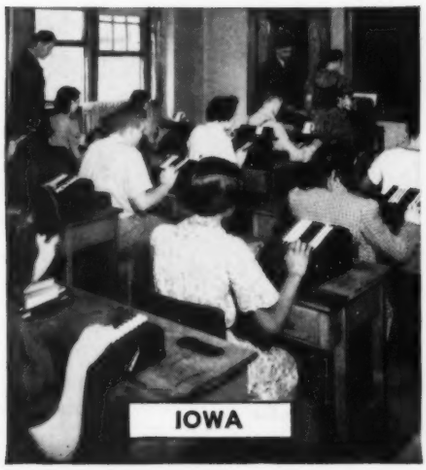

Pupil Injuries in Automobiles

M. M. CHAMBERS
Specialist in School Law

MANY thousands of high school pupils are transported in private automobiles for the purpose of participating in athletic contests or other interscholastic events. In earlier days such transportation was often by train. In this progressive age there is a tendency toward the use of the regular school buses for such purposes. As yet, however, in many places this kind of use of school buses is prevented by statutes, court decisions or board rulings. Often, too, it seems more convenient to press into service the ever present private automobile, often generously offered by some member of the school faculty or their families or friends.

Here, as in all other widespread types of transportation, accidents happen and injuries result. Who, if anyone, is liable in damages for negligence in such cases? I have not discovered any case in which an attempt was made to charge with liability the school district or the school board members. Usually, the issue concerned the responsibility of the owner or driver of the car or both. Often these persons are themselves teachers, pupils or parents of pupils. Therefore, the outcome is of great interest to school people, even though the school district and its officers are not involved as parties.

Accidents that have occurred in private automobiles generously donated for the purpose of transporting pupils for participation in interscholastic events often have involved owner and driver in liability suits for injuries to pupils

Driver as Agent of Owner

Idaho furnishes two cases that throw light on the matter. On the day before a football game between the high schools of Soda Springs and Paris, the teacher of Latin and home economics at Soda Springs approached the young man who taught mathematics and acted as football coach and asked him if he had enough cars for the morrow's needs. He replied that he needed one more, whereupon she said he could use her car if he would drive it himself. He accepted, and on the next day got the car and filled the tank with gasoline at the expense of the board of education, as was the custom, and set out for Paris with four members of his football team in the borrowed car.

At a sharp curve in the highway the car left the road and careened across a ditch and into a near-by gulch. The coach received injuries from which he died almost immediately. One of the boys with him sustained a fracture of the femur, which kept him in a hospital for twelve weeks. He and his father sued for damages against the teacher of Latin and home economics as owner of the car, and in the trial court they won verdicts and judgments for a total of about $5800.

On appeal to the supreme court of Idaho the judgments were affirmed but not without a strong dissent by one of the justices. The opinion contains some valuable discussion of the principles involved[1]. First, the fact of ownership alone raises a presumption that the person driving the car is acting as agent of the owner. If this is not overthrown by the evidence, the owner will be liable for the negligence of the driver on familiar principles of the law of agency, conveniently called the doctrine of *respondeat superior*.

If, on the other hand, the driver merely borrowed the car for purposes other than those of the owner and used it without being directed or controlled in any way by the owner and did not pay and was not expected to pay anything for its use, then he was what is called a gratuitous bailee and his negligence would not be imputed to the owner under Idaho law.

Then, too, there is the matter of proof that the driver actually was negligent and that his negligence was the proximate cause of the injury. Moreover, there is the question of whether the injured boy was a "gratuitous guest" in the car within the meaning of an Idaho statute which prevents a person from recovering for the negligence of the driver "if, being conscious of danger, he fails opportunely to protest" prior to the occurrence of the accident.

The majority of the court held that in this case the driver was agent of the owner on the strength of her admitted statement that he could use her car "if he would drive it himself." This, the court insisted, put such a face on the transaction that it could not be classed as a mere ordinary gratuitous loan. On this point Justice Budge dissented, declaring that the quoted words did not import any intent to control the driver in his use of the car but merely showed confidence in his ability. The trip was not for any purpose of the owner and there was a total lack of evidence, thought this judge, that the driver was acting as agent for anyone, unless, perhaps, of the school district.

Issue of Contributory Negligence

As to proof of negligence, there was sufficient evidence of excessive speed to make the court unwilling to disturb the verdict of the jury on that point. Likewise, although the injured boy readily testified that he did not protest the excessive speed, he also testified that he was not conscious of any danger prior to the accident and the fact that he had been directed by the coach to get into the car made it doubtful that he was a gratuitous guest. Thus, the issue of contributory negligence was one of fact for the jury. Here, again, the supreme court refused to question the verdict of the lower court.

[1]Gorton *v.* Doty, (Ida.), 69 P. (2d) 136 (1937).

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Justice Budge dissented further. In argument before the jury, the defense attorney had said that the plaintiff was trying to "mulct" the defendant, whereupon the plaintiff's counsel told the jury that as business men they should know that prudent persons usually protect themselves against such contingencies (meaning that they carry liability insurance). The trial court, recognizing this last remark as an improper argument, had instructed the jury to disregard it; but Justice Budge thought this would not cure the defect because testimony regarding insurance is never admissible on the issue of negligence and whenever it appears in the record the judgment thereon is generally held reversible.

He also thought the trial court had erred in refusing to instruct that if the owner had loaned the car to the driver then she would not be liable even if he was negligent. A statute provides that a gratuitous bailor of a car to a person over the age of 16, not in his employ and not known to be careless or incompetent, is not liable for the negligence of the bailee. Obviously, the decision was close and difficult and it is not surprising that only two years later a somewhat similar case reached a different outcome in the same court.

There was to be a girls' basketball game between the high schools of Twin Falls and Blackfoot. A member of the Twin Falls team obtained her father's consent for the use of his car to transport half of the Twin Falls party. The party set out in two cars, the leading one driven by a male teacher, with the one driven by our girl player following. All the girls had been assigned to the cars and to their seats by the woman teacher who acted as team coach.

The caravan encountered a truck driven at a high rate of speed by an intoxicated driver, approaching from the opposite direction and occupying the wrong side of the road. The leading car, to avoid the oncoming truck, was driven off the highway and into the ditch, at some risk but without mishap.

The girl driver of the second car applied the brakes but remained on the highway and collided with the truck. One of the girls riding with her was injured and sued for damages against both the girl driver and her father as owner of the car. She won a verdict and judgment against both parties in the trial court, but the supreme court of Idaho reversed the judgment and directed that the case be dismissed[2].

As to the father, thought the court, neither the "family purpose doctrine" nor mere ownership of the automobile made him liable because admittedly no purpose of his was being served by the trip. The only question of agency was whether he had directed his daughter to drive the car. There was no evidence that he had so directed her. Hence, the court could absolve him without being inconsistent with its earlier decision in the Soda Springs case, though the distinction is close.

As to the girl driver, a majority of the court held there was no proof of negligence. An innocent driver is not bound to take the risk of driving off the highway in order to avoid a collision. But Justice Givens dissented here, on the ground that the question of negligence was properly for the jury and that the verdict should not be disturbed.

The foregoing cases are only samples drawn from a complex and difficult area of law. The principles enunciated by the Idaho court no doubt might be applied elsewhere but in some states they are negated or modified by statutes or lines of judicial precedents. The subject does not lend itself to the formulation of bound principles of law or public policy relating to the public schools, unless, perhaps, it might be said to point toward the wisdom of providing pupils and teachers in such circumstances with the greater degree of safety afforded by transportation in regular public school conveyances.

[2]Colwell *v.* Bothwell et al., (Ida.), 89 P. (2d) 193 (1939).

What Happens to Eighth Graders

IN A spot survey of what happened to the 1940 eighth grade graduates in Sauk County, Wisconsin, Supt. Marshall Canaan has published the following information:

In the final tabulation for all schools within the county, 77.1 per cent of the 302 graduates were in high school—73.2 per cent of the boys and 81.2 per cent of the girls. The oldest boy was 18 years 4 months and the youngest, 12 years 7 months, making a range of 5 years 9 months, while the oldest girl was 16 years 9 months and the youngest, 12 years 7 months, making a range of 4 years 2 months. The median for the boys is 14 years 4 months and for the girls, 14 years 1 month.

This study indicates, in general, that (1) the pupils are not kept home for work; (2) parents are willing to finance whatever expenses are necessary to enable pupils to attend high school, and (3) parents and pupils realize and appreciate that education cannot end with the completion of eighth grade work.

There are eight graduates from rural schools whose chronological ages range from 18 years 4 months to 15 years 11 months. Out of this number, only one pupil (boy) is enrolled in high school. There may be learning difficulties or, because of their age and size, there may be inferiority complexes. Parents may feel these pupils are needed at home for work since the majority of them live on farms. It appears, too, that these overage pupils have the urge to seek employment even though the salary or wages may be small.

A comparison of the pupils from the rural schools with the pupils from the seven others not enrolled in high school shows that a large percentage of the village children are not employed on farms or in their homes and that perhaps parents are better able to finance and keep their children in high school.

The pupils who are not enrolled in high school are not handicapped because of distance, since the median or average for all pupils from the nearest high school is 6½ miles. The greatest distance for two pupils is 16 miles and the shortest distance for three pupils is 2 miles.

Since the chronological age seems to be a determining factor for pupils not enrolled in high school, there appears to be a need for vocational courses in lieu of high school work, especially for the boys who are interested in the vocational phases of farm and shop work.

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• • • The Kewaunee Mfg. Company wishes to announce the removal of the general offices and Wood Furniture Division of the company from Kewaunee, Wisconsin to Adrian, Michigan as of February, 1941.

• • • A thoroughly modern and highly efficient woodworking plant has been erected at the site of our metal furniture factory at Adrian to house our entire woodworking division.

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• • • The consolidation of our Wood and Metal Divisions at Adrian will permit us to offer constantly improved service in both wood and metal Scientific Laboratory Furniture to that large group of scientists and educators whom we regularly serve with the finer laboratory furniture.

• • • Since the whole of the month of February will be required for relocating the Wood Furniture Division and general offices of the company at Adrian, we will be unable this year, as has been our custom, to greet our many friends at the Department of Superintendence Convention at Atlantic City.

• • • We shall welcome the opportunity of conducting interested scientists and educators on an inspection trip through our highly modern new manufacturing plant whenever the opportunity affords of visiting Adrian.

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The Nutritionist at Work

FRENCH BOYD

**Nutritionist, School Health Coordinating Service
North Carolina State Board of Health**

THE problem of improving the nutritional status of the school child is complicated by three major obstacles: (1) ignorance, (2) poverty and (3) habit. In order to work effectively in any attempt to improve the nutrition of the school child these obstacles must be overcome or at least circumvented. How then is the best way to work?

The North Carolina School Health Coordinating Service is a new agency set up under the direction of the state board of health and the state department of public instruction. Part of the funds which make this work possible are contributed by the Rockefeller Foundation. At present the staff consists of the coordinator, who is a physician, two public health nurses, two physical education advisers, a Negro physician, a Negro health education worker and a nutritionist.

Purpose of This Service

The purpose of the board of health and the department of public instruction in putting this staff into the field has been to stimulate closer integration of the health work of the schools, the public health staffs and other agencies in the community that can contribute to the improvement of the health of the school child.

The first objective has been to learn the economic conditions, food habits, customs, prejudices and attitudes of the people in the community. Having learned these things, we should be ready to begin work.

Our first approach has been through the schools. The nutritionist has talked with the principals, has discussed the food habits of the pupils with the teachers, has learned what the individual teacher has been doing in the way of nutrition teaching and has offered suggestions and teaching material that may be used. In almost every case teachers have invited the nutritionist to talk to their children in order to impress them with the importance of nutrition.

These classroom talks have been the backbone of the nutrition teaching program. They have served as a demonstration to the teacher of a method of teaching nutrition and they have provided an opportunity to come into close contact with large numbers of children, to give suggestions and to gain much information from them. It has been learned, for example, that teaching food values and emphasizing the importance of certain foods in the body have little effect on the child's food habits.

In many classrooms children "know all the answers" but fail to do anything about their bad eating habits. If we ask Johnny to name a food that he knows he needs, he may answer "milk." We ask him why and the answer comes back as though we had pushed a button: "Makes you healthy." Children who live on impossible diets will tell you that they need a quart of milk a day, green vegetables, fruit and eggs, because they "make you healthy." As far as these children are concerned that is the end of it.

How to Correct Bad Food Habits

Our problem, then, was to devise some means of getting the knowledge used. So in classroom talks we put the cart before the horse. We did not start to talk about food. We began with growth. All children were interested in growing, they loved to be weighed and measured, they liked to show their muscles, to look at their nail beds to see if they looked healthy and pink. They wanted to have "pep," to look healthy and to feel good. So this was tied to a natural interest in nutrition teaching. We discussed growth, we asked and answered questions and pupils learned from these discussions what lime does for their bones or iron for their blood, why they need them and where they are to be found.

This method really worked. Here are a few examples taken from classrooms:

A first grade teacher asked that we discuss the need for drinking milk. The school was in a rural community but many of the families sold all their milk to a distributor. The teacher had tried to get the children to bring milk for lunch but less than half had done this.

Stimulating Milk Drinking

We started our discussion with questions about height. The children decided that they were as "tall as their bones." Then they began to wonder what made their bones grow tall. They knew that babies' bones are soft like a piece of gristle in meat or like the cartilage in the ends of their noses. What, then, made this soft bone get hard? What would happen if they failed to get enough lime? Where could they get enough if they didn't drink milk? They decided that their stomachs were not big enough to hold sufficient vegetables or fruit to give them all of the lime they needed for their bones and teeth. So if they did not drink milk their bones could not grow as strong and straight and long as they should.

Two months later the same classroom was visited. The teacher reported that every child was bringing milk for lunch and that most of them said that they were drinking milk for breakfast and supper.

In another school in which most of the children came from poor tenant families lunches were the big problem. The principal said that since supervised lunch periods had been initiated many children refused to bring lunch and that others hid their faces in their lunch bags as they ate. They had little choice of foods at home and were ashamed of the things they could bring. The

teachers said that most of the families had an abundance of sweet potatoes but that there was a ban on sweet potatoes in lunch boxes. Soda crackers and peanut butter were the fashionable things to bring to school for lunch.

We began with a seventh grade group. We talked about the things they did from the time they got up in the morning (at 4:30 or 5 o'clock for many of the children) until they returned home in the afternoon at 4 or 5 o'clock. The pupils decided that each thing that they did required energy and that they should get that energy from food since they did not want to tear down their bodies to burn for energy. They counted the hours from breakfast until supper and decided that they could not possibly eat enough breakfast to last so long. So they needed to bring a lunch to school, especially if they were going to play baseball or to do anything that required energy.

The pupils decided to see how many different things they could suggest that would be good for lunch. They named vegetables, starting with lettuce and tomatoes, which few of the children had. They decided that cabbage salad or canned tomatoes brought in a jar would taste good with sandwiches, that homemade whole wheat crackers would be good for a change from soda crackers or biscuit. Raw carrot or raw turnip strips would taste good with meat sandwiches. But still no one dared mentioned sweet potatoes. Finally, as an outsider, who knew nothing of the situation, the nutritionist mentioned sweet potatoes "for a change."

This suggestion was greeted with roars of laughter.

"What!" asked the poor benighted nutritionist, "don't you like sweet potatoes?" Giggles, then:

"Oh, yes, we like them."

"Do you eat them at home?"

To this an emphatic "Yes, ma'am."

"Then why not eat them at school?"

Much giggling. The nutritionist is obviously puzzled. Finally one of the boys comes to her rescue.

"If you bring them to school the other kids will call you 'taters.'"

We all laughed at this and the children realized that it sounded silly. So we decided to put one over on the rest of the school. Everybody in the seventh grade, we agreed, was going to bring a big baked sweet potato for lunch and when the other kids yelled, "Hello, taters," they would yell back, "Hello, crackers."

Two weeks later sweet potatoes were popular throughout the school and they were not kept hidden in lunch bags.

But there is still the economic problem to be faced. When we find a community in which people are living at a bare subsistence level, what shall we do? Shall we set up a "minimum adequate diet" and say in effect: "If you can't get this you will be malnourished." We think not. We believe the diet of the poorest person can be improved without increased cost. We also believe that in almost every locality it is possible for every family to raise enough vegetables to meet its needs. In rural communities they can raise chickens and keep a cow. But can we get them to do it?

That question remains to be answered. We know that we cannot succeed by preaching, any more than we can get Johnny to eat spinach by telling him that it is good for him. We must teach Johnny's parents to want a garden because there will be things in that garden that they want for themselves and their children.

In many communities our only approach to the parents is through their children. We utilize every opportunity to reach the parents directly, through parent-teacher associations, home demonstration clubs and other organized groups. But the old problem of reaching those who most need help, those who cannot or will not attend meetings, remains. The best method of carrying information to them and of stimulating their interest is through the school child. Although we know that this method brings results slowly, we feel that it is practicable.

In dealing with habits we face the fact that habits change slowly. We can no more expect completely to change the food habits of a community or even of a family in a short time than we can expect to change their habits of speech in a short time. We must be content to start at the baseline of conditions as we find them and to build gradually toward our objective, adequate nutrition for every person in the state of North Carolina.

Getting rural pupils to bring proper foods in their lunch boxes is a problem even in areas in which farmers raise a variety of food products. In North Carolina state nutritionists have been suggesting to rural children foods that they have at home, such as cabbage salad, carrots and canned tomatoes, which can be used to supplement the usual sandwich and cracker lunch.

A. A. S. A. Convention Program

Saturday, February 22

All Day—Registration and exhibits in Atlantic City Auditorium.

2 p.m.—Joint Conference on Teacher Education.

7 p.m.—"The People's Platform," CBS broadcast under the direction of Lyman Bryson.

8 p.m.—National Society for the Study of Education, presenting yearbook on "Art in American Life and Education."

Sunday, February 23

4:30 p.m.—Vesper Service, President Carroll R. Reed, presiding. Music by Hampton Institute Quartet and address, "The Citizens of Tomorrow," Ralph W. Sockman, pastor, Christ Church, New York City.

8:30 p.m.—Program of American music by Madrigal Singers of Philadelphia and a concert orchestra directed by Jeno Donath.

Monday, February 24

9 a.m.—"Education to Provide for the Common Defense," President James B. Conant, Harvard University. Also addresses by Governor Harold E. Stassen of Minnesota and John W. Studebaker, commissioner of education.

2:15 p.m., Discussion Groups—"Developing an Effective Health Program in the Schools," Supt. William J. Hamilton, Oak Park, Ill.

"Military Training and the Schools," Supt. Homer W. Anderson, St. Louis.

"Technological Foundation for the Defense Through Vocational Training," Alonzo G. Grace, state commissioner of education, Hartford, Conn.

"Training of Apprentices for Essential Industries," Supt. Charles H. Lake, Cleveland.

"Developing an Appreciation and Loyalty for American Ideals Through Citizenship Education," Supt. L. H. Lamb, Flint, Mich.

"How Research and Personnel Selection Can Contribute to National Defense," Supt. H. M. Corning, Omaha.

"Opportunities for the Rural Child," Bertram E. Packard, state commissioner of education, Augusta, Me.

"What Can the Elementary Schools Do to Assist in Meeting the Defense Situation?" Supt. W. Howard Pillsbury, Schenectady, N. Y.

"Presentation of Defense Policies in the Secondary Schools," Supt. A. L. Threlkeld, Montclair, N. J.

"Adult Education and the National Defense," Supt. Harry H. Clark, Knoxville, Tenn.

"Cooperation Between School and Lay Groups and Between School Authorities and Governmental Agencies," Supt. David E. Weglein, Baltimore.

8 p.m.—"Peace and Power Politics, 1941," President Isaiah Bowman, Johns Hopkins University. Also an address by Congressman Martin Dies of Texas.

Tuesday, February 25

9 a.m.—"Education and Economic Well-Being," John K. Norton, Teachers College, Columbia University. Also addresses by Philip Murray, president of the C.I.O. and member of the board of education, Pittsburgh, and by Supt. Willis A. Sutton, Atlanta, Ga.

2:15 p.m., Discussion Groups—"Occupational Adjustment as a Means of Combating Unemployment," Dean Edwin A. Lee, School of Education, University of California.

"The Development of Intelligent Consumers," Supt. James M. Spinning, Rochester, N. Y.

"Improving the Offering of the Secondary Schools," Supt. John H. Bosshart, South Orange and Maplewood, N. J.

"Meeting the Problems of Modern Youth," Floyd W. Reeves, director, American Youth Commission.

"Economic Well-Being," Supt. James L. Hanley, Providence, R. I.

"Adequate Financial Support for the Schools," Supt. J. W. Ramsey, Fort Smith, Ark.

"Progress in Teacher Welfare," Supt. H. Claude Hardy, White Plains, N. Y.

"The Conservation of Our Natural Resources," Supt. L. John Nuttall Jr., Salt Lake City, Utah.

"Social Services and the Schools," Supt. G. E. Roudebush, Columbus, Ohio.

"Juvenile Delinquency and the Schools," Supt. R. E. Dugdale, Portland, Ore.

"Special Education in the Care of Physically and Mentally Handicapped Children," Harold W. McCormick, board of education, Brooklyn, N. Y.

8 p.m.—Associated Exhibitors' Program.

"Tribute to the Recipient of the American Education Award," Carroll R. Reed.

Presentation of Education Award to Frank P. Graves, Mr. Stonehouse.

Response, Frank P. Graves.

Music by National Broadcasting Company Orchestra and by Gladys Swarthout.

Radio broadcast by the Quiz Kids.

Wednesday, February 26

9 a.m.—"The Spiritual Aspect of Education for Family Life," presented through music and verse by Heinz Chapel Choir, University of Pittsburgh.

"Public Education and the American Home," President Aurelia Reinhardt, Mills College.

Radio Dramatization of 1941 Yearbook on "Education for Family Life."

2:15 p.m., Discussion Groups—"Preserving the Liberties We Are Determined to Defend," Supt. DeWitt S. Morgan, Indianapolis.

"How Can the School Help the Home Serve Its Function as a Character-Developing Agency?" Supt. Worcester Warren, Bridgeport, Conn.

"Promoting the Study of Community Life," Supt. Vierling Kersey, Los Angeles.

"The Selection of Teaching Personnel," Supt. E. E. Oberholtzer, Houston, Tex.

"Selection of Textbooks," Supt. W. W. Ankenbrand, Yonkers, N. Y.

"The Schools and Religious Instruction," Supt. Merle J. Abbett, Fort Wayne, Ind.

"Education for Leisure Time," Supt. Julius E. Warren, Newton, Mass.

"Democratic Procedures in School Administration," Supt. R. H. Waterhouse, Akron, Ohio.

"Special Education in the Care of Physically and Mentally Handicapped Children," Harold W. McCormick, board of education, Brooklyn, N. Y.

"Professional Status of the Superintendent of Schools," Supt. Otto W. Haisley, Ann Arbor, Mich.

"School Libraries and the Defense of American Liberties," Asst. Supt. Prudence Cutright, Minneapolis.

"Our Relations With South American Countries," Supt. Orville C. Pratt, Spokane, Wash.

8:30 p.m.—"War and Us," Major George Fielding Eliot.

Thursday, February 27

9 a.m.—Report of Committee on Resolutions, Supt. H. H. Eelkema, Duluth, Minn., chairman.

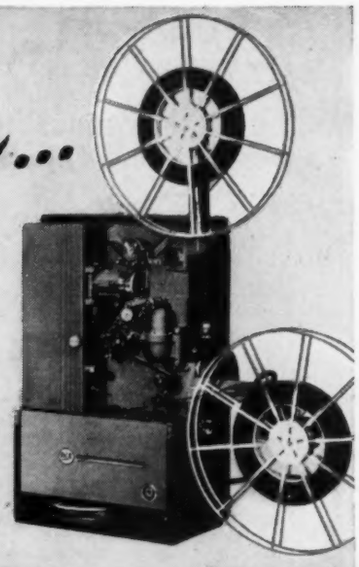
"Education and Our National Defense," Supt. Ben G. Graham, Pittsburgh.

"Liberties and Duties," Everett R. Clinchy, president, National Conference of Christians and Jews.

"The Truth and Fiction About the Fifth Column in the U. S.," Gerhart Seger, political refugee and former member of German Reichstag, who escaped from concentration camp in December 1933.

2:15 p.m.—International Relations, program to be announced later.

On the Broadways of America...



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CEILING FALLS, 15 PUPILS HURT

All Children About 10; Three Critically Injured

OKLAHOMA CITY, Dec. 6 (UP) — Fifteen children, all about 10 years old, were injured today when the ceiling of a schoolroom collapsed upon them during an examination period just before dismissal.

The accident came 40 minutes before school was to be dismissed for the day. The pupils in 4-A grade at the Westwood Grade School were writing on an English examination when the ceiling fell upon them.—*Boston Post*, Dec. 7, 1937.

Public building officials spend considerable time and money in the construction and maintenance of public buildings—with an eye to the safety of human life—but are still confronted with the hazards and expense of falling plaster ceilings.

The installation of the CARILLI METACOUSTIC CEILING is the answer to this problem.

Metacoustic can be quickly and inexpensively installed in new buildings and directly over existing plaster ceilings in old buildings.

It is safer—more attractive, fire resistant, and improves acoustical values—and has an appreciable amount of thermal insulation.

Acoustical tile is inserted into metal pans under pressure—cemented and nailed therein, thus eliminating the common fault of falling or buckling.

Panels made in 2 standard sizes (24x24 in. and 16x16 in.).

Panel ribs separating acoustical inserts are pre-painted in white or cream color.

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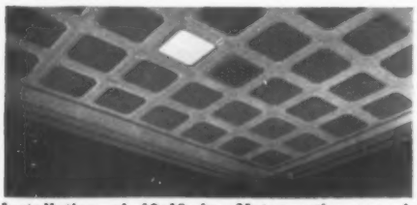
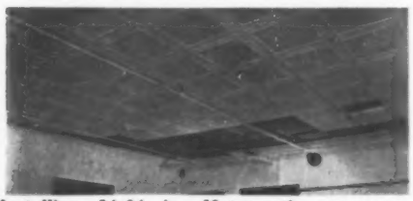


Installation of 16x16 in. Metacoustic pans in insurance office, 40 Broad Street, Boston.



Installing 24x24 in. Metacoustic pans over broken plaster ceiling at Claflin School, Newton, Mass.

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News in Review

Education for Family Life

Members of the 1941 Yearbook Commission will present this year's theme, "Education for Family Life," in one of the most unusual and distinctive programs ever given at an A.A.S.A. convention. There will be three features:

1. The spiritual aspect of education for family life will be given through music and verse, sung and spoken by the Heinz Chapel choir of the University of Pittsburgh under the direction of Dr. Theodore M. Finney and Prof. Buell B. Whitehill.

2. A brief, appropriate address to be given by Dr. Aurelia Reinhardt, president of Mills College.

3. Through cooperation of N.B.C., the Yearbook will be dramatized for radio presentation by one of America's leading dramatists. This dramatization will be presented on the stage of the convention hall by a company of professional radio actors. Recordings of this presentation will be made available to superintendents who may wish to repeat the broadcast for local, school or classroom use.

INSTRUCTION

Engineering Colleges Cooperate

Sixty-four American engineering colleges have announced 250 intensive training courses designed to meet the shortage of engineers for service as designers, inspectors and supervisors with the industries and government agencies engaged in the national defense program.

Prospective students must satisfy the engineering schools that they have the requisite technical training and experience to understand the subject and that they are employable in defense work. Those accepted will have their tuition costs paid by the federal government. Congress recently appropriated $9,000,000 to be administered by the U. S. Office of Education for this purpose.

Industry Cooperates for Defense

At Dickinson High School, Jersey City, N. J., training classes for machine operators are running twenty-two hours a day with expert craftsmen from a local industry assisting in the training of more than 450 unemployed men for vital national defense jobs.

The instruction trains the men for specific jobs; thus, in an eight to ten weeks' course, students are qualified to fit into jobs that normally would require months of study. Three fourths of the course is devoted to teaching the men how to run their machines; the remainder is given to instruction in blueprint reading, measuring instruments, shop mathematics, machine technology and shop safety. Special machine tools needed for the classes have been supplied by the local manufacturer. More than 350 men already have found jobs upon completion of the course.

Close Clandestine Schools in Brazil

When Getulio Vargas, president of Brazil, established his new government, he found that there were some 1200 schools that were exclusively German and many that were exclusively Japanese. Of his army conscripts, several hundred or more were unable to speak Portuguese, Brazil's native tongue. He immediately ordered that every school must teach Portuguese and that every teacher be a Brazilian. However, his decree was disregarded and he forthwith closed more than 200 German schools and about a third as many Japanese schools.

The Japanese paid only surface heed to the decree. The Brazilian department of education discovered that the Japanese were maintaining schools underground and with secret barricaded enclosures. The police found 78 schools in which Japanese was taught from Japanese books, Japanese flags decorated the schoolroom and the picture of Japan's emperor was on the walls. In some of the schools they discovered books that explained how to make bombs and airplanes.

MEETINGS

Group Extends Membership

For a number of years from 50 to 200 administrative officers and faculty members representing municipally supported teacher education institutions have been meeting informally at the same time and place as has the A.A.S.A. At. St Louis last February, officers of the group reorganized the association to extend membership to all teacher training institutions located in metropolitan districts.

The reorganized National Association of Teacher Education Institutions in Metropolitan Districts has announced that it will hold a meeting restricted to the membership on February 23 at the Chalfonte-Haddon Hall, Atlantic City, N. J. The program for a general meeting open to all has been arranged for Saturday evening, February 22, at the Ambassador Hotel. The theme of this meeting, "The Utilization of Community

Detroit Public Library

Resources in Teacher Education," is in harmony with the announced purpose of the association.

Speakers who are to give fifteen minute addresses at the public meeting are: Dr. Henry J. Otto, educational consultant, W. K. Kellogg Foundation; Dr. W. E. Lessenger, Wayne University; Dr. John A. Bartky, Chicago Teachers College; Dr. George N. Shuster, president, Hunter College, and Dr. Russell T. Gregg, Syracuse University.

ADMINISTRATION

Illinois Superintendents' Code

The Illinois City Superintendents' Association recently adopted a code of professional ethics drawn up by a committee of six members of which Frank A. Jensen, superintendent, La Salle-Peru Township High School and Junior College, La Salle, Ill., is chairman. The code covers the superintendents' relationships with the profession, the community, the board of education, the teachers, pupils and parents.

To Discontinue 125 Classes

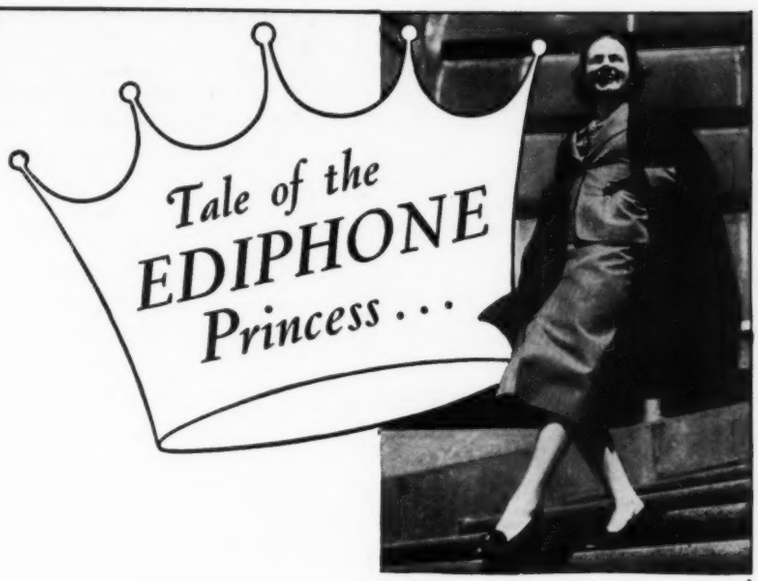
New York City's school population is shrinking so fast that teachers eventually may have to be dropped from the staff, Dr. Harold Campbell, superintendent, said in announcing that 125 high school classes would not be reorganized with the beginning of the new school term on February 3. He said, however, that the instructors now teaching these classes would not lose their jobs since they would move into vacancies caused by deaths, retirements and resignations.

TRANSPORTATION

Traffic Experts Look to Schools

The lives of at least 100,000 American children who would otherwise be killed during the next decade in traffic accidents alone can be saved through safety education, according to the first biennial report of the national center for safety education at New York University.

During 1939, according to the report, 93,000 persons lost their lives and 8,800,000 others were injured. For help in meeting this situation traffic authorities are turning to the schools. They believe that the schools can be of greater assistance as time goes on because they know that from the beginning of the organized child safety movement in 1922 to 1940 an estimated 75,000 children who otherwise would have been killed during that time in traffic accidents alone owe their lives to the habits and attitudes of safety that they learned in school.



ONCE upon a time there was a girl named Cinderella, who set out to find her fairy godmother. And, being a smart girl, she found her and was handsomely rewarded. But this is 1941, and the security of a good job is achieved, not by magic wands, but by a sound modern business education.

This 1941 is a *production* year. Business is being speeded up, new jobs created, existing jobs geared for increased effectiveness. There's a bigger-than-ever demand for *Ediphone* efficiency to keep office procedure abreast of the times.

Schools this year have an unparalleled opportunity to place Ediphone-trained students in pleasant, well-paid positions.

The course, "Ediphone Voice Writing and Integrated Studies," is comprehensive and completely integrated, embracing all the important functions of the capable secretary. We sincerely believe that you owe it to yourself, your students and their future employers to write for complete data on the modern secretarial course. Address Dept. NS2, Thomas A. Edison, Inc., West Orange, N. J., or Thomas A. Edison of Canada, Ltd., 610 Bay St., Toronto.

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N. E. A., Atlantic City, Feb. 22-27.

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At The ANNUAL CONVENTION OF THE AMERICAN ASS'N OF SCHOOL ADMINISTRATORS

Atlantic City, Feb. 22–27

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Super-powered by special geared head ball-bearing motor for speed and efficiency. Perfectly balanced . . . a woman can run one all day without tiring. 9 years on the market and the first Silent Chief has yet to wear out! 5 models and 4 sizes.

On the Air During February

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System, the Mutual Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Sundays

10:30 a.m.—National Youth Orchestra (CBS).
11:30 a.m.-12:00 noon—Music and American Youth (NBC Red).
12:30-1:00 p.m.—Wings Over America. Stirring and significant story of aviation (NBC Red).
1:00-1:15 p.m.—I'm an American. A series devoted to expositions by distinguished naturalized Americans of the privileges and responsibilities of the democratic way of life (NBC Blue).
1:00-1:15 p.m.—March of Health (MBS).
1:30 p.m.—March of Games. Children's quiz game program, directed by Nila Mack (CBS).
1:30-2:00 p.m.—On Your Job. Dramas of America's work and workers, based on research by Frank Ernest Hill of the American Association for Adult Education (NBC Red).
1:30-2:00 p.m.—Sundown on the Veldt. Josef Marais in folk songs of the African Bushveld (NBC Blue).
2:00 p.m.—Brazilian Exchange Program (CBS).
2:00-2:15 p.m.—American Pilgrimage. Broadcasts from the homes of famous American authors (NBC Blue).
2:30-3:00 p.m.—University of Chicago Round Table (NBC Red).
2:30-2:45 p.m.—Foreign Policy Association Program (NBC Blue).
3:00 p.m.—New York Philharmonic-Symphony Orchestra. Directed by John Barbirolli. Deems Taylor, commentator (CBS).
3:00 p.m.—Columbia Symphony Orchestra (CBS).
3:00-4:00 p.m.—Great Plays. A series of masters' works tracing the development of drama (NBC Blue).
4:30 p.m.—Invitation to Learning. CBS Adult Education Board program (CBS).
4:30-5:00 p.m.—The World Is Yours. Produced by U. S. Office of Education and Smithsonian Institution (NBC Red).
4:30-5:00 p.m.—Pageant of Art. The dramatic story of fine arts through the ages (NBC Red).
7:30-8:00 p.m.—Speak Up, America. New quiz program developed to further better speech (NBC Blue).
8:00-8:45 p.m.—American Forum of the Air (MBS).
10:30 p.m.—Columbia Workshop. Produced by Douglas Coulter, CBS director of broadcasts.

Mondays

9:15-9:45 p.m.—American School of the Air: "Americans at Work" (CBS).[2]
2:30-3:00 p.m.—Rochester Civic Orchestra (NBC Blue).
3:45 p.m.—Columbia's Lecture Hall. Lectures on a variety of subjects by eminent speakers (CBS).
6:00-6:15 p.m.—Citizens All. Produced in cooperation with the National Congress of Parents and Teachers. A series of round table discussions on citizenship. Dean Ernest O. Melby of Northwestern University, chairman (NBC Red).
10:00-10:15 p.m.—Story-Dramas by Olmsted. Dramatized versions of the world's great short stories. Nelson Olmsted portrays all of the characters in his dramas. Mondays, Tuesdays and Wednesdays (NBC Blue).
10:30-11:00 p.m.—Adventure in Reading (NBC Blue).
10:30-11:00 p.m.—National Radio Forum. Questions of national interest discussed by men in Washington who are working on answers to political, economic and social problems (NBC Blue).

Tuesdays

9:15-9:45 a.m.—American School of the Air: "Wellsprings of Music" (CBS).
2:30-3:00 p.m.—United States Army Band. Capt. Thomas F. Darcy, conductor (NBC Blue).
3:45 p.m.—Children Also Are People. Talks by specialists in the field of child welfare, presented in cooperation with the New York City Committee on Mental Hygiene of the New York State Charities Aid Association (CBS).
10:15 p.m.—Invitation to Learning. An informal discussion of the world's classics by Huntington Cairns, Allen Tate and Mark Van Doren (CBS).
10:30-11:00 p.m.—Meet Edward Weeks. The editor of the *Atlantic Monthly* discusses and dramatizes literature (NBC Blue).

Wednesdays

9:15-9:45 a.m.—American School of the Air: "New Horizons" (CBS).
2:15-2:30 p.m.—Echoes of History. General Federation of Women's Clubs, producer (NBC Blue).
3:45 p.m.—Columbia Lecture Hall (CBS).
7:30-8:00 p.m.—Cavalcade of America. Dramatizations of American history (NBC Red).
8:00-8:30 p.m.—Quiz Kids. These children from the schools of Chicago and vicinity, all under 15, reveal an amazing fund of information (NBC Blue).
10:30-11:00 p.m.—Doctors at Work. Sixth annual health series presented by the American Medical Association (NBC Blue).

Thursdays

9:15-9:45 a.m.—American School of the Air: "Tales From Far and Near" (CBS).
12:00 noon-12:15 p.m.—Conservation Reporter (MBS).
12:15-12:45 p.m.—Navy School of Music (MBS).
3:45 p.m.—Adventures in Science. This program is planned in conjunction with Science Service (CBS).
9:35-10:30 p.m.—America's Town Meeting of the Air (NBC Blue).
10:30-11:00 p.m.—Musical Americana. Programs of American music with eminent soloists and symphony orchestra directed by Raymond Paige (NBC Red).
10:30-11:00 p.m.—The Listeners' Playhouse (NBC Red).
10:30-11:00 p.m.—Musical Americana. Programs of American music with symphony orchestra and mixed chorus directed by Raymond Paige (NBC Red).

Fridays

9:15-9:45 a.m.—American School of the Air: "This Living World" (CBS).
2:00-3:00 p.m.—Music Appreciation Hour. Directed by Walter Damrosch (NBC Blue).
3:45 p.m.—Exploring Space. Stories of the constellations, Maude Bennot, director, Adler Planetarium, Chicago, commentator (CBS).
4:15-4:45 p.m.—University Life (MBS).
9:30-10:00 p.m.—Everyman's Theater. A series of plays written and produced by Arch Oboler (NBC Red).
11:15-11:30 p.m.—The Story Behind the Headlines. Produced in cooperation with the American Historical Association. Cesar Saerchinger, commentator (NBC Red).
11:30-12:00 midnight — Unlimited Horizons. Produced in cooperation with the University of California, Stanford University and the California Institute of Technology. Dramas and discussions of the physical sciences (NBC Blue).

Saturdays

11:05 a.m.—Philharmonic-Symphony Young People's Concert. Rudolph Ganz, conductor (CBS).
12:30 p.m.—Let's Pretend. Dramatic adaptations of fairy tales and original fantasies by Nila Mack. Enacted by Junior Stock Company (CBS).
12:00 noon-12:25 p.m. — American Education Forum. Designed to interest laymen as well as educators (NBC Blue).
12:00 noon-12:30 p.m.—Milestones in the History of Music. Produced by Eastman School of Music (NBC Red).
1:00-1:15 p.m.—This Wonderful World (MBS).
1:00-1:15 p.m.—Of Men and Books. Reviews of books and discussions of authors by Prof. John T. Frederick, Northwestern University (CBS).
1:15 p.m.—Highways to Health. Medical talks for the layman, arranged by the New York Academy of Medicine (CBS).
2:00-5:00 p.m.—Metropolitan Opera (NBC Blue).
5:00-5:30 p.m.—The World Is Yours. Produced in cooperation with the U. S. Office of Education and the Smithsonian Institution (NBC Red).
7:00 p.m.—People's Platform. Round table discussion of social, economic and political problems, Lyman Bryson, chairman (CBS).
7:30-8:00 p.m.—Listener's Playhouse. A series devoted to new radio writing and experimental production technics (NBC Blue).

8:15-8:30 p.m.—Man and the World. Produced in cooperation with the Chicago Museum of Science and Industry and the American Museum of Natural History of New York. A new series devoted to the men of science and their achievements (NBC Blue).

8:30 p.m.—The Human Adventure. Dramatizations of outstanding cultural and intellectual contributions of leading universities through the world. Presented by the University of Chicago and CBS.

9:35-11:00 p.m.—NBC Symphony Orchestra (NBC Blue).

[1]Except Sunday.

[2]The American School of the Air will be broadcast over the Columbia Broadcasting System stations from 9:15 to 9:45 a.m. E.S.T.; 2:30-2:55 p.m.; C.S.T.; 9:30-10:00 a.m., M.S.T., and 2:00-2:30 p.m., P.S.T.

RADIO

Music Educators Fight N.A.B. Ban

Ten prominent music educators have charged the National Association of Broadcasters with musically starving the public by denying them the works of a generation of musical artists whose works the association has banned for commercial reasons.

This committee has asked the intervention of the Federal Communications Commission to force the major networks and stations to perform the music controlled by the American Society of Composers, Authors and Publishers.

The committee is composed of Howard Hanson, director of the Eastman School of Music; Deems Taylor, composer; Douglas Moore, chairman of the department of music, Columbia University; Philip James, chairman of the department of music, New York University; A. Walter Kramer, editor; Daniel Gregory Mason, composer; Albert Stoessel, head of the New York Oratorio Society; Randall Thompson, director of the Curtis School of Music; Abram Chasins, pianist, and Frederick Jacobi, Juilliard School of Music.

HEALTH

Penny Milk Program Popular

The penny milk program in the New York City public schools has become so popular since its inauguration last October that the children are now drinking nearly five times as much milk as they were last September. The program is currently being conducted in 130 schools, where it reaches 128,000 children daily. Eventually, it is expected to affect 500 or 600 schools.

The program, besides being beneficial to the children, many of whom could not buy milk until the penny rate was instituted, also benefits the producers and dealers. It enables them to sell their surplus milk; dealers are able to buy it at reduced prices because of the purpose for which it is intended. The dealers also are said to turn over a good profit since their sales are increased.

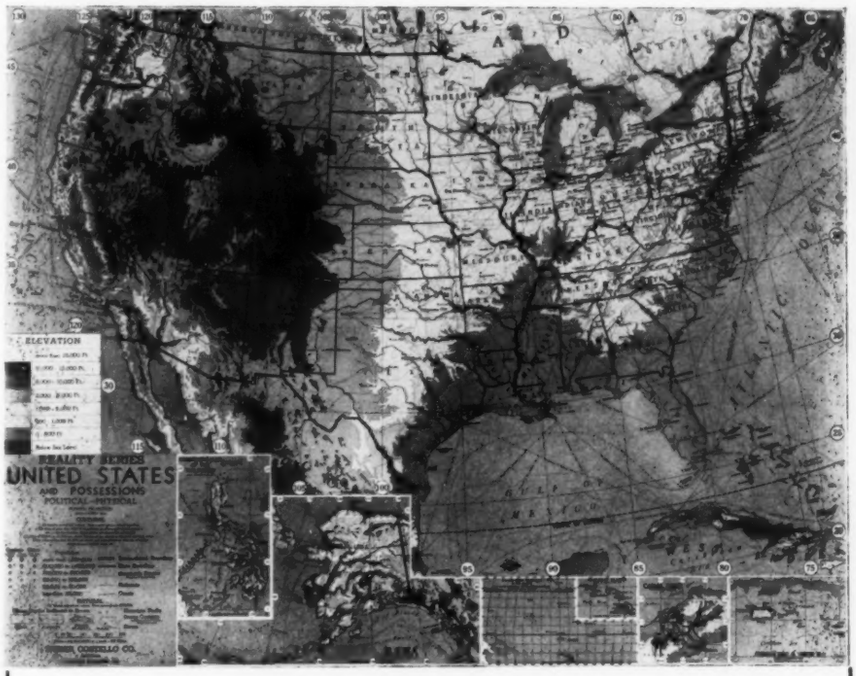
Each child pays 1 cent for a half-pint bottle of milk. The 4 cents a quart the dealers receive from the children is far below the cost of the milk, so the dealers are reimbursed the difference by the surplus marking administration of the U. S. Department of Agriculture.

Health for Defense

A seven point program to strengthen national defense through improved health and physical fitness of every child in every school throughout the country is recommended by the U. S. Office of Education.

School administrators and health workers who recently met in conference at the call of Dr. John W. Studebaker, commissioner of education, drafted a seven point proposal:

1. Obtain and maintain a safe and healthful school environment.
2. Make adequate provision for the school lunch.
3. Provide health service for pupils, teachers and other school employes.
4. Give instruction in health and safety.
5. Make provision for physical activities intended to develop physical and social fitness.
6. Provide recreational programs to meet needs of children and youths after



UNITED STATES IS ONLY ONE!

The many times reduced United States map which heads this column is only one of Weber Costello's eight new Reality Political-Physical Maps just off the press.

This new Reality Series, edited and designed by Miss Edith Putnam Parker of the University of Chicago, offers many improvements over existing wall maps, and is well worth the investigation of your teachers.

See the actual maps at our N.E.A. Convention Booth; ask us to mail you advance information about them. For rush response, address Dept. N-241.

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CHICAGO HEIGHTS, ILLINOIS

school and in vacation periods and needs of adults in the community.

7. Establish educational camps to ensure for all children the experiences that only come from close contact with nature.

Health Projects for N.Y.A.

State-wide health projects for N.Y.A. workers were put in operation in all states and territories on January 1 as part of the N.Y.A.'s $2,500,000 health program. By February the N.Y.A. will have accumulated mass data on the health of 100,000 young people.

The projects are being directed along three channels: (1) a physical appraisal by means of a technically competent health examination of every youth assigned to the N.Y.A. out-of-school work program; (2) correction of health defects through maximum utilization of community resources, through the use of supplementary medical and dental services provided where possible by the N.Y.A., and through developing in youths an interest in improving health by their own personal efforts, and (3) improved technical advice and assistance with respect to all N.Y.A. efforts having a direct and immediate bearing on the health of young workers, such as nutrition, sanitation and recreation.

SPAL DOES 3 JOBS AT ONCE!

Spal cleans by new Expurging Action

Spal gives floors a Lustrous Polish

Spal leaves a film of Surface Protection

MAINTAINING school floors correctly isn't the long, costly job it used to be. With Spal Liquid Scrub Compound you can now clean the floor, give it a lustrous polish, and leave a film of surface protection that reduces the number of necessary cleanings. You do *all 3 jobs* at the same time, in *one,* instant-action operation.

Spal is an amazing cleanser, probably unlike anything you've ever used before. It offers an entirely new method of cleaning—a new expurging action that dissolves dirt, draws it to the surface and *floats* it away. A specially developed light filler leaves a non-slippery surface film that reveals the true beauty of the floor.

To obtain top-notch economy and streamlined maintenance, try Spal *now.* You'll find its 3-way labor saving action the best investment you can make for your floors.

Spal is safe for all types of flooring. Approved by leading flooring manufacturers.

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HUNTINGTON INDIANA

Try SPAL
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Chicago Dental Project

The Chicago Citizens' Committee for Adequate Dental Care has announced the establishment of a W.P.A. School Dental Project for Chicago school children. The sponsorship has been taken over by the department of education and the work is to be done by the department of health. Those to be served are needy children on relief or those recommended by social agencies.

One hundred twenty-five dentists will be engaged to do the work. The Chicago Dental Society will supervise the appointment of the dentists.

The board of education is to supply all equipment, which eventually will be used to set up permanent dental clinics in the schools. The board now owns 20 old dental chairs and has purchased 46 more.

VISUAL EDUCATION

Visual Educators to Meet

The N.E.A. department of visual instruction has planned a timely program for its winter meeting at the Hotel Traymore, Atlantic City, N. J., February 24 to 26, including national defense and wartime use of motion pictures.

Paul C. Reed of Rochester, N. Y., president, will give his report at the opening session, February 24.

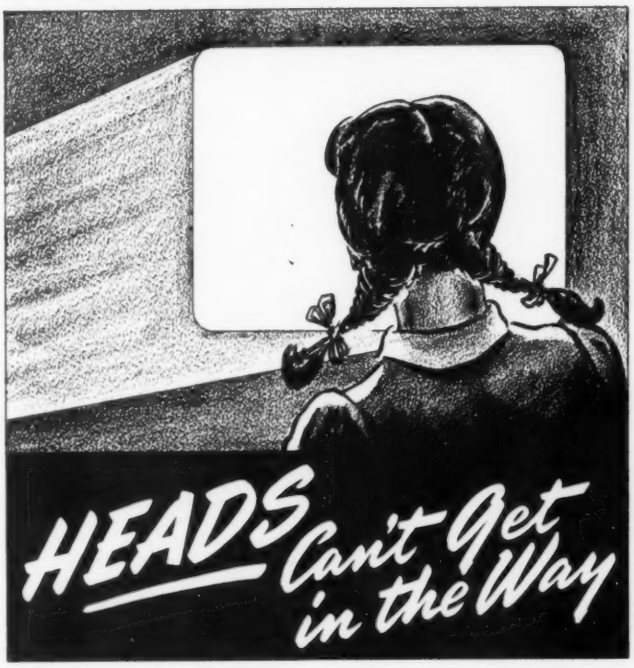
Headliners on the program will be Dr. Ralph Tyler, University of Chicago, who will discuss "Education in Defense of Democracy," and Richard Ford, British Library of Information, who will talk on "The Wartime Use of Motion Pictures in Britain."

Edgar Dale of Ohio State University will conduct a symposium on "Free Materials—a Blessing or a Blight for Education?" at the afternoon session on February 25.

Other visual educators who will appear on the program are: John A. Maurer, Society of Motion Picture Engineers; Floyd E. Brooker, American Council on Education; Blake Cochran, American Council on Education; B. A. Aughinbaugh, state director of visual education, Ohio; William G. Hart, Dearborn, Mich.; Ford L. Lemler, University of Michigan; O. H. Coelln, *Business Screen;* John E. Hansen, University of Wisconsin; Boyd B. Rakestraw, University of California; Godfrey Elliott, Princeton, W. Va.; Ernest LaFollette, Grosse Pointe, Mich., and William H. Hartley, Paterson, N. J.

Grant for Visual Research

An initial grant of $1000 has been made to Indiana University by Coronet Productions, Inc., for educational motion picture research. The results of the research will be used as a basis for plan-



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(Reg. U. S. Pat. Off.)

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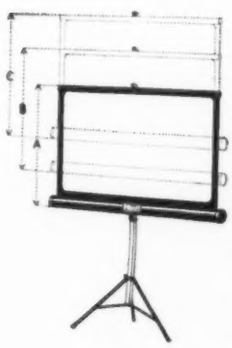

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This popular screen has Da-Lite's famous Glass-Beaded surface which shows pictures brighter and clearer. It is the only screen that can be adjusted in height merely by releasing a spring latch and raising the extension rod. No separate adjustments of the case. 12 sizes including square sizes, from 30 in. x 40 in. up.

Ask your supplier about Da-Lite Screens and Accessories! There are styles and sizes for every school requirement. Write for literature. *See the Da-Lite Exhibit at the N.E.A. Convention, Booths J5 and J7.*

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ning and producing educational motion pictures for classroom use. The research will be supervised by staff members of Indiana University and its purpose is to analyze the curriculum content of grades 1 to 12 in order to determine those topics for which motion pictures may provide a more adequate experiential background.

Three New Studies

Three studies on the use of motion pictures in the classroom, ranging from interpretation of films in social science courses to the outlining of methods for darkening a classroom, have been published recently by the committee on motion pictures in education of the American Council on Education.

Findings have been obtained in demonstration centers established at Tower Hill School, Wilmington, Del.; the general college, University of Minnesota, and the public schools of Denver, Minneapolis, Pittsburgh, Santa Barbara, Calif., and Rochester, N. Y.

The three studies are: "A School Uses Motion Pictures," by the staff of the Tower Hill School; "Films on War and American Policy," by Blake Cochran, and "Projecting Motion Pictures in the Classroom," Francis W. Noel, director of visual education, Santa Barbara.

WILL PHOTOS LIKE THESE *be made in your new school?*

How will they clean the floors, the walls, erasers and boiler tubes in your new school? Can you picture any other method as flexible, thorough, easy to use and as low in cost in the long run as the Spencer Vacuum Cleaning illustrated here? The great majority of educators and architects would say, "No—there is no better way."

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Coming Meetings

Jan. 3-4—Ohio Education Association, Columbus.
Feb. 6-8—Oklahoma Education Association, Tulsa.
Feb. 13-15—American Camping Association, Washington, D. C.
Feb. 18-21—National Association of Deans of Women, Atlantic City, N. J.
Feb. 19-22—National Vocational Guidance Conference, Atlantic City, N. J.
Feb. 19-22—Progressive Education Association, Philadelphia.
Feb. 20-22—International Council for Exceptional Children, New York City.
Feb. 23-26—National League of Teachers' Associations, Atlantic City, N. J.
Feb. 22-27—American Association of School Administrators, Atlantic City, N. J.
Feb. 27-Mar. 1—American Association of Junior Colleges, Stevens Hotel, Chicago.
March 27-29—Midwest Conference on Rural Education, University of Illinois, Urbana.
March 6-9—Southern Conference for Music Education, Charlotte, N. C.
March 15-19—North Central Music Educators Conference, Des Moines, Iowa.
March 29-April 2—Northwest Music Educators Conference, Spokane, Wash.
April 3-5—North Carolina Education Association, Asheville.
April 6-9—California-Western Music Educators Conference, San Jose, Calif.
April 9-11—Inland Empire Education Association, Spokane, Wash.
April 16-17—Eastern Arts Association, New York City.
April 16-18—National Catholic Educational Association, New Orleans.
April 16-19—Southwestern Music Educators Conference, Wichita, Kan.
May 2-7—Eastern Music Educators Conference, Atlantic City, N. J.
May 5-9—American Association of University Women, Cincinnati.
June 20-21—Ohio Education Association, Cedar Point, Ohio.
Oct. 9-11—Utah Education Association, Salt Lake City.
Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.
Oct. 22-25—New Mexico Educational Association, Albuquerque.
Oct. 23-24—New Hampshire State Teachers Association, Nashua.
Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.
Oct. 24-25—Maryland State Teachers Association, Baltimore.
Oct. 29-31—West Virginia State Education Association, Charleston.
Oct. 29-31—North Dakota Education Association, Minot.
Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.
Nov. 6-8—Iowa State Teachers Association, Des Moines.
Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.
Nov. 7-9—New Jersey Education Association, Atlantic City.
Nov. 13-15—Arizona Education Association, Phoenix.
Nov. 18-21—Virginia Education Association, Richmond.

NAMES IN NEWS

City Superintendents

CECIL W. MARTIN, superintendent at Peru, Ill., has been granted a leave of absence to complete his work toward the Ph.D. degree at Columbia University.

NICHOLAS BAUER, superintendent in New Orleans, has been reelected for a new four year term by the Orleans Parish school board.

PRESTON H. SMITH retired as head of the school system at Bayonne, N. J., January 1. His successor is DR. HOWARD E. MERITY, principal of the Bayonne Senior High School. At the same time EDWARD BERMAN was made assistant superintend-

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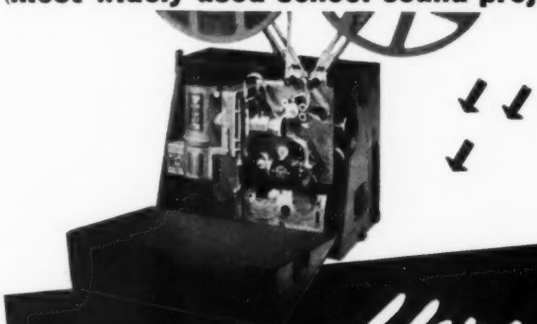

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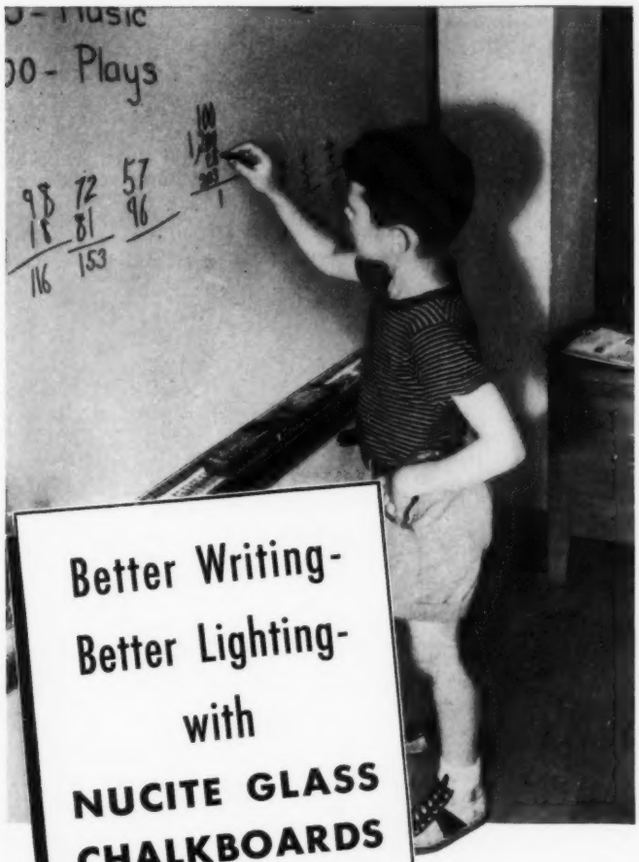

Better Writing- Better Lighting- with NUCITE GLASS CHALKBOARDS

NUCITE Glass Chalkboard has made "blackboard" an out-dated word. For Nucite chalkboards are available in ivory and green, as well as black. These shades of ivory and green were scientifically selected to promote better lighting, to reduce glare, to protect pupils' eyesight. The school room with Nucite boards is a brighter, more cheerful room.

But color is not the only advantage of Nucite. This glass chalkboard has a new surface, too . . . a surface that takes chalk easily, erases easily, and never wears out! It is formed by fusing to plate glass a vitreous material containing an abrasive. Nucite never needs re-surfacing.

Being glass, Nucite has no pores to absorb odors. Moisture and chemicals can't hurt it. You can wash it as often as desired. Send the coupon for free literature.

See the exhibit of* NUCITE GLASS CHALKBOARD *at the American Association of School Administrators' Convention, Atlantic City, N. J., February 22nd to 27th. Booth No. A-54-56 in the Auditorium.

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GLASS CHALKBOARD IN COLORS

PITTSBURGH PLATE GLASS COMPANY

Pittsburgh Plate Glass Company,
2056-1 Grant Bldg., Pittsburgh, Pa.

Please send me, without obligation, your free literature which gives the facts about Nucite Glass Chalkboard.

Name_____

Address_____

City_____ State_____

Detroit Public Library

ent of schools and DR. WALTER F. ROBINSON, principal of Roosevelt School, was appointed successor to Doctor Merity as head of the senior high school. ANNA M. O'DONNELL, vice principal at Roosevelt School was named a principal.

DENNIS C. HALEY, headmaster of Hyde Park High School, Hyde Park, Mass., for the last six years, recently was appointed acting assistant superintendent by the Boston school committee. He is expected to become an assistant superintendent next August.

JAMES LUTHER, principal at Antigo, Wis., has been named superintendent at Delavan, Wis. He formerly was principal at Kalispell, Mont. He succeeds T. J. JENSEN, who resigned to become superintendent at Fond du Lac, Wis.

PHILIP WESNER, principal of the Willard School, Winchester, Ind., has been appointed superintendent of Winchester schools succeeding ELLIS H. BELL, who has been named assistant state superintendent of public instruction in Indiana.

ANGUS B. ROTHWELL, principal of Central High School, Superior, Wis., since 1935, has been appointed city superintendent at Superior to succeed W. R. DAVIES. Mr. Davies resigned to become president of the Eau Claire State Teachers College at Eau Claire, Wis.

TAKE A CRITICAL LOOK AT YOUR WASHROOMS

IT'S DOUBLY IMPORTANT these days to have good washroom facilities. First, of course, because it's an obligation to your pupils. Second, because the growing use of schools as community centers naturally attracts adults to your buildings. And adults are sure to expect up-to-date facilities for washing faces and hands.

Take a critical look at your washrooms. If they're not all they should be, here's a suggestion. Consider Ivory Soap Dispensers.

These modern soap dispensers will do a lot to give your washrooms that up-to-date look. They're attractive. They invite use. For they deliver a soap known and liked from coast to coast—pure, gentle Ivory Soap.

Ivory Dispensers put no heavy strain on school budgets. They are low in first cost and in upkeep. An illustrated folder tells all about Ivory Dispensers. Write for it.

IVORY SOAP DISPENSERS

PROCTER & GAMBLE

INDUSTRIAL SALES DEPT. NS • GWYNNE BLDG. • CINCINNATI, OHIO

County Superintendents

Twenty-three counties in the state of Florida at the November election chose new men to the office of county superintendent of public instruction. The new incumbents are as follows: Alachua County, HOWARD W. BISHOP; Bay County, M. M. MASHBURN; Dixie County, W. F. HILL; Duval County, W. DANIEL BOYD; Escambia County, A. S. EDWARDS; Flagler County, Z. D. HOLLAND; Franklin County, A. S. HAM; Gulf County, THOMAS OWENS; Hardee County, L. H. DRIGGERS; Hendry County, C. E. WEAVER; Hernando County, E. R. RUSSELL; Jackson County, E. T. DENMARK; Lafayette County, J. R. MEDLOCK; Lake County, F. J. BANNING; Levy County, T. F. McCALL; Marion County, BROWARD LOVELL; Okaloosa County, JOHN F. CAMPBELL; Pasco County, WALTER C. CRAID; Polk County, F. E. BRIGHAM; Santa Rosa County, B. GROSS; Suwannee County, PERRY A. HOLMES; Taylor County, PAUL D. BIRD; Union County, RICHARD WARREN.

Principals

ELMER O. HOFFMAN has retired as principal of Nott Terrace High School, Schenectady, N. Y.

ROBERT ADAMS JR. has been made principal of the Scotch Plains High School, Scotch Plains, N. J.

HAROLD MILLS, high school coach, Bruce, Wis., was named principal of the high school recently.

DR. BURTON P. FOWLER has announced his resignation as headmaster of Tower High School, Wilmington, Del., to become effective September 1. At that time he will become headmaster of the Germantown Friends School, largest day school in the East.

HARRY M. COOPER, principal of the Shiloh Schools in West Manchester Township, near York, Pa., has been elected supervising principal of the Dover Borough and Township Joint High School, Dover, Pa.

G. DENIS MEADOWS has resigned as headmaster of Greenwich Country Day School, Greenwich, Conn., effective in June.

FRANK M. FAIRCHILD, head of the aero science department at Automotive High School, Cincinnati, is the new night school principal of the aviation division of the school.

WILLIAM H. SHIPE has resigned as principal of Middle Township High School, Cape May, N. J.

WILSON NEW, principal of Christenberry Junior High School, Knoxville, Tenn., succeeded G. J. HARDY as principal of Stair Technical High School Knoxville, on January 6. Mr. Hardy resigned to become district supervisor of trade and industrial instruction for the Tennessee state board of education.

GAYLORDS Announce...

A New Straight Charging Desk...Attractively Designed

DESIGNED for work where the Gaylord Sectional Charging Desk is not required, this new charging desk gives you the following important features . . . at an attractive price.

A standard type center drawer is provided with pen tray and lock. The right-hand pedestal has a sliding shelf, a drawer with two trays for book cards and an open, sliding bin for books. The left-hand pedestal has a sliding shelf, a drawer with trays for application cards and a letter size vertical file drawer. All are equipped with ball-bearing, steel, suspension slides for easy operation.

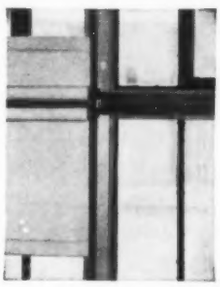
Write today for *complete* information and price.

• *Modern in design, this straight charging desk is made of quarter-sawed white oak in light or dark finishes or of maple in standard finishes. Center legs are recessed. Corners are rounded — expert workmanship.*

GAYLORD BROS., Inc. *Est. 1896* SYRACUSE, N. Y. STOCKTON, CALIF.

Originators and Makers of Better Library Furniture and Supplies

TIME TO RESHADE WITH DRAPER'S SIGHT-SAVERS!



Vertical Light Shield for Draper "V" Double Roller Shade

Just as the horizontal shield keeps out the light from between the rollers, now the Vertical "V" Light Shield illustrated above, keeps out the light gaps from the sides of the shades.

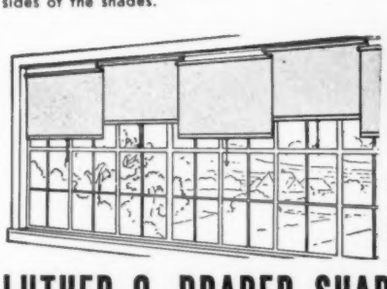
Replace the unattractive, worn out shades and notice the difference in classroom efficiency! Draper Sight-Saving Shades are made from Dratex cloth—the functional material designed to evenly diffuse and let in all the light, yet keep out harmful glare.

A regulating feature permits Draper Shades to be lowered from the top or raised from the bottom. This permits only the restful, non-glaring top light to come in and provides proper ventilation without any annoying shade-flapping.

These classroom beautifiers reduce shade maintenance costs to a fraction, yet they cost no more than ordinary shades.

★ **We will be pleased to have you inspect the Draper Style "V" Double Roller Shade and the Draper X-L Unit, as properly applied to windows in Booth E-43—American Association of School Administrators Atlantic City**

Ask About Draper Darkening Shades for Visual Education Rooms.



The Draper X-L Window Shading Unit, for any light opening over 9 ft. wide, avoids the use of unwieldy and impractical shades of large size for multiple windows, glass block walls, etc.

LUTHER O. DRAPER SHADE COMPANY
SPICELAND Dept. NS 2 INDIANA

MEDART HIT PARADE

1

Write for Catalog

New Basketball Backboard and Goal

Strictly in accord with official specifications as recently established by the National Basketball Committee . . . The new, streamlined Medart Backboard is 'pressed-out' of a single sheet of steel . . . Quantity production makes extremely attractive prices possible . . . Before changing your equipment get complete details of the Medart Steel Backboard and Goal—"No better equipment at any price!"

Fred MEDART Mfg. Co.
3532 DeKalb Street St. Louis, Mo.

Trade News

A Preview of A.A.S.A. Convention Exhibits

Audio-Visual Education Equipment

Convertible to Sound

For those who want silent film projection now but who may wish to switch to sound film projection later, the Ampro Corporation, Chicago, has produced the Ampro 16 mm. Convertible-to-Sound projector. Ampro Model "YC" is essentially a sound projector minus the amplifier and sound features but is provided with all castings for convenient conversion to sound. It has the capacity for a 1600 foot reel, sufficient for one hour of uninterrupted showing of silent film.

Facilities for School Projection

New developments in motion picture equipment for schools will be displayed by the Bell & Howell Company, Chicago. Among these new developments are: the revolutionary "safe-lock" sprocket guard, which prevents improper threading of the projector; the new "constant tension" take-up device eliminating take-up difficulties, and the new recorder attachment permitting use of the sound projector as a recorder. A new film editor, the Filmotion Viewer, has been developed and silent projectors have been improved. The "Auto-Load" and "Auto-Master" 16 mm. cameras also are new.

Travel Films, Diction Records

During 1940 Erpi Classroom Films, Inc., Long Island City, N. Y., produced a great number of geographical films regarding the culture of foreign nations, particularly in the Far East and in Latin America.

This company also is offering a series of phonograph records for teaching pronunciation and diction in French, Spanish and Latin.

Well-Rounded Audio-Visual Display

Among the many types of audio-visual equipment on display at the RCA Victor exhibit at Atlantic City, be sure to see and hear the RCA 16 mm. Sound Motion Picture Projector, now fully approved for the use of 1000 watt lamps. Also on exhibit will be RCA Victor's outstanding console and table models, school sound systems for the distribution of speech, radio and phonograph record programs to any or all rooms in the school.

Three Dimensional Projector

The Society for Visual Education, Inc., Chicago, has produced a new projector, Model SA, making it possible to project on the screen three dimensional pictures. Polaroid three dimensional pictures reproduce the natural visual system. A double camera makes a record on film of the two views our eyes would normally receive if we were present at the scene. The projector, Model SA, projects both of these pictures on the screen, one upon the other, each through its own polaroid filter. The audience views the screen with polaroid viewing glasses and, just as in actual vision, the brain fuses these two images into one impression.

Budget Your Audio-Visual Program

Victor Animatograph Corporation's Visual Edu-Graph now permits educators and school administrators accurately to determine their audio-visual aid requirements and to establish economical starting budgets. This is a series of comprehensive charts that point the way to savings and wider utility in the purchase of films and equipment. School superintendents, principals or school board members may request this complimentary service at the Victor booth or by letter.

Foot Control for Projector

Spencer Lens Company, Buffalo, N. Y., will show a new foot control for the opaque projector, known as the Spencer Delineascope Model VA. The foot control frees both hands for manipulation of books or periodicals under the instrument. Also new is a 150 watt MK Delineascope for 2 by 2 inch slides, in which a heat absorbing glass is used to make possible the high voltage lamp without danger to films. Copies of a new booklet, "Opaque Projection—A New Frontier in Teaching," will be passed out at the exhibit free of charge.

No. 1024
Beckley-Cardy
Challenger Desk

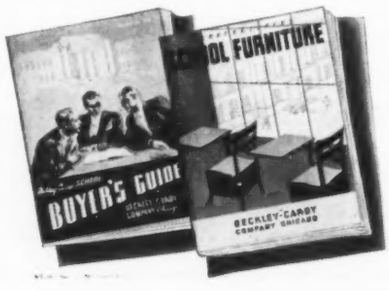
Designed to give maximum comfort, promote correct posture, adjust to all normal requirements. Rigid steel frame; extra-braced desk top.

SEE IT AT
THE N.E.A. CONVENTION
BOOTHS G-35, 37, 39

ANTICIPATION—keeps your school plant up with the times

Educational seating developments have forged ahead rapidly. Among those engineers close to the problem, Beckley-Cardy's staff of experts has rendered important service. They *know* that during childhood's formative years comfortable, good posture seating, suitable desk "storage"—together with *size and function flexibility* are *ALL* paramount. Today, seating problems are studied with an eye to the child's future as well as that of the school. Write Beckley-Cardy for advice on specific problems—or for prices, specifications, illustrations of the complete *Beckley-Cardy* line.

LET THESE CATALOGS HELP YOU to do your buying better. School furniture and equipment fully described and illustrated. Write today for No. 140N and No. 70N catalogs. No obligation.



BECKLEY-CARDY
1632 INDIANA AVENUE • CHICAGO

CAFATRAYS

Eleven Correct Sizes—
One for Every Service

The special composition from which Cafatrays are made is light, yet strong; richly grained, yet permanently beautiful; noise absorbing, yet completely sanitary.

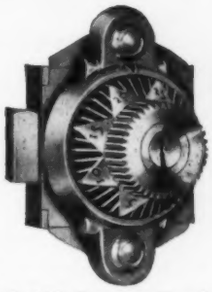
Leading schools everywhere have found Cafatrays ideal for the exacting demands of their service. And, it is important to note that Cafatrays are not expensive.

Ask your equipment dealer — and *demand genuine CAFATRAYS.*

CHELSEA PRODUCTS, 281 11TH AVE. • NEW YORK

Modernize old Lockers

with built-in master-keyed DUDLEY LOCKS



S-642 Square Dead Bolt, Master-keyed, Combination Lock

Now is a good time to install a simple, trouble-free Dudley master-keyed locking system to replace your old locker locks. You'll find a new freedom from administrative control. Every school lock, including every locker, cabinet, desk and door, can be master-keyed together, or in any combination of groups. A single Dudley 4-in-1 masterkey is all you require to open any lock.

Furthermore, combinations can be changed *instantly* on built-in master-keyed locks without removing any part of the lock. Simply insert the patented Dudley reset key, turn knob, and a new combination is available for the incoming class. No other lock offers this Dudley feature that saves time and labor.

Dudley Locks are ruggedly built, last indefinitely and are quick and easy to operate. Write for catalog showing the complete Dudley line.

DUDLEY LOCK CORPORATION

Dept. 210, 325 N. Wells St.
Chicago, Illinois

Invitation

Be sure to visit our booth, No. E13, at the NEA convention at Atlantic City, February 22-27.

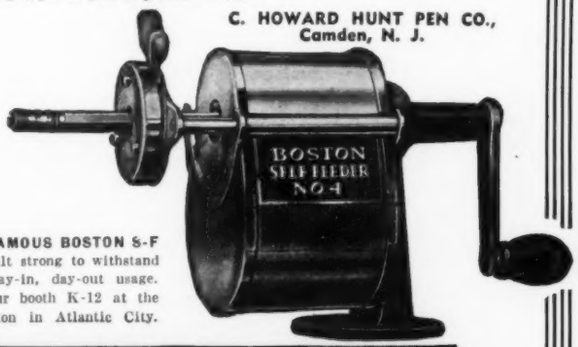
The 3 R's *of*

BOSTON'S SELF-FEEDER NO. 4

Right for all popular pencil sizes!
Ready when it's needed—easily adjusted!
Reduces costs because it saves time and pencils!

The famous Boston Self-Feeder No. 4 is the pencil sharpener for classrooms. It stops cutting when the proper point is made; it sharpens all popular-sized pencils to firm, uniform points. Like all Boston sharpeners it has the exclusive speed cutters—15 cutting edges—which actually cut—never scrape. Boston S-F 4 will give you long life and satisfactory service always! Specify 15 cutting edges on your requisition sheet.

C. HOWARD HUNT PEN CO., Camden, N. J.

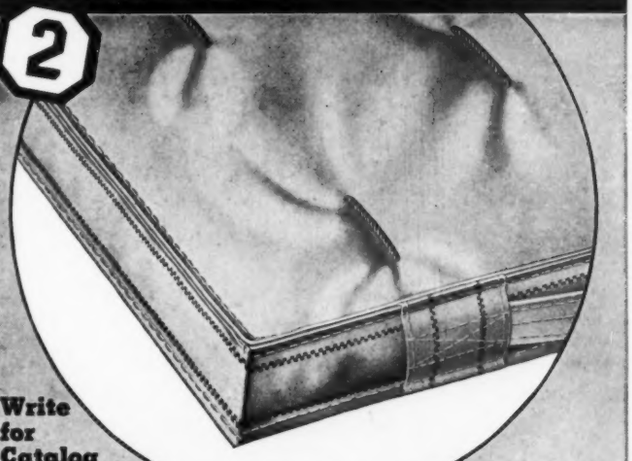


THE FAMOUS BOSTON S-F 4 is built strong to withstand hard, day-in, day-out usage. Visit our booth K-12 at the Convention in Atlantic City.

BOSTON *PENCIL SHARPENERS*

MEDART HIT PARADE

2



Write for Catalog

New FOBAFIMI SISAL GYM MATS

The greatest improvement in Mat construction in 50 years . . . Medart Gym Mats with Fobafimi Sisal Filler Pad are clean, sanitary, and easy to keep that way . . . Heavy duty construction throughout . . . Next time, insist on Medart Fobafimi Sisal Mats for a new experience in resiliency . . . Write for complete details concerning this radically new and improved mat.

Fred MEDART Mfg. Co.
3532 DeKalb Street St. Louis, Mo.

Neumade Exhibits for First Time

Several new products to supplement their line of film accessories, especially designed for the school film library, have been announced by the Neumade Products Corporation, 431 West Forty-Second Street, New York City.

Details are not yet available but these products will be displayed for the first time at the Neumade exhibit during the A.A.S.A. convention.

A 36 page booklet, fully illustrated, listing more than 75 items needed to establish and maintain an educational film library is available on request.

Band Instruments

Fun With the Tonette

New music method teaches the child to sight read, become pitch and interval conscious and learn all the fundamentals of music in real play, with a new instrument called the Tonette and the Melody Fun Method. This new program, originated and developed by the Lyons Band Instrument Company of Chicago, has been proved in all the schools in which it has been tried and tested.

Calculating Machines

New Office Practice Machine

Monroe Calculating Machine Company, Inc., Orange, N. J., will introduce at the A.A.S.A. convention a simplified low capacity, low priced accounting machine for use in schools in office practice departments or bookkeeping classes. This machine is equipped with motor tabulation, manual return of carriage dater, front insertion of forms and a rewind tally tape.

To Demonstrate Quick-Score Grader

Dr. Floyd B. Lee, dean of the Kansas State Teachers College, Hays, Kan., inventor of the Quick-Score Grader, will be in the Multiplex Display Fixture Company's booths at Atlantic City to demonstrate the grader. This new machine scores any recognition short answer examination. The pupil uses a specially prepared check sheet on which his answers are indicated. The check sheet is spread over a punch board which has 630 precision punched holes for scoring.

To Show Two New Machines

The Underwood Elliott Fisher Company, New York, will show two new adding machines at the A.A.S.A. convention. These are the new quiet model Underwood Sundstrand Portable Adding Machine, completely remodeled and restyled for modern schools and businesses, and the completely new Underwood Sundstrand Portable Electric Quiet Model Duplex, which computes automatically in two column registers. Both of these machines have the simplified Underwood Sundstrand three point control. Underwood typewriters will be shown and demonstrated by Grace Phelan and Barney Staper, world's champion typists, at the Underwood booth.

Chalkboards

New Glass Chalkboard

The Pittsburgh Plate Glass Company will exhibit at the convention the new glass chalkboard, Nucite, which was brought out by that company last year. This product is still new enough to be a novelty to many educators who may not have encountered it first hand.

Detergents and Disinfectants

Synthetic Detergent

Arctic Syntex M, a recent development in the field of synthetic detergents, or soapless soaps, is to be exhibited by the Colgate-Palmolive-Peet Company, Jersey City, N. J. Chemically a sulphated fatty ester, the following properties are attributed to it: it has a neutral reaction; it is stable in hard water, metal salt solutions and acid solutions; it disperses lime soaps; it does not promote shrinking or felting of woolens; it removes cloudy lime deposits from glassware and dishes; it keeps white and colored silks and woolens soft. Recommended for washing rugs and upholstery, it is available in bead, flake and liquid form.

Fungicide and Disinfectant

Vestal Chemical Laboratories, Inc., St. Louis, will show its newest development of interest to schools, the Vestal F-D Fungicide and Disinfectant (odorless), at the convention. This product has been developed to combat the spread of athlete's foot in school swimming pools, locker rooms and showers. It is said to be odorless and as safe to use as soap and water; it retains its strength, and it is economical to use.

Duplicators

Gelatin Duplicator

The newest Ditto rotary gelatin duplicator brought out by Ditto, Inc., of Chicago, delivers 100 bright copies from each original

Group Type Wash Fixtures Ideal For School Shops, Too

Handy washing facilities encourage cleanliness. Hundreds of schools and institutions, large and small, are equipped with group type wash fixtures such as Bradley Washfountains which provide clean, sanitary *running water* for each person from a central sprayhead. No chance of contamination since the bowl is self-flushing.

One Washfountain while serving 8 to 10 simultaneously, requires no more piping connections than a single-person basin, reducing installation and maintenance expenses. Water consumed is 70% less . . . For further information on modern group type wash fixtures, write for our new 1941 Catalog. BRADLEY WASHFOUNTAIN CO., 2207 W. Michigan Street, Milwaukee, Wisconsin.

Write for new 1941 Catalog

BRADLEY WASHFOUNTAINS

"NATIONAL" Presents a FULL-SIZE COMBINATION SHACKLE LOCK AT 50¢

SUGGESTED RESALE PRICE TO STUDENTS: 60¢ TO 75¢

• Built for long life, hard service . . . will save you money! Is full size, has extra-heavy die-cast case and dial, is fully rust-proofed. Self-locking when shackle is inserted. 64,000 possible combinations. Spray-baked aluminum finish.

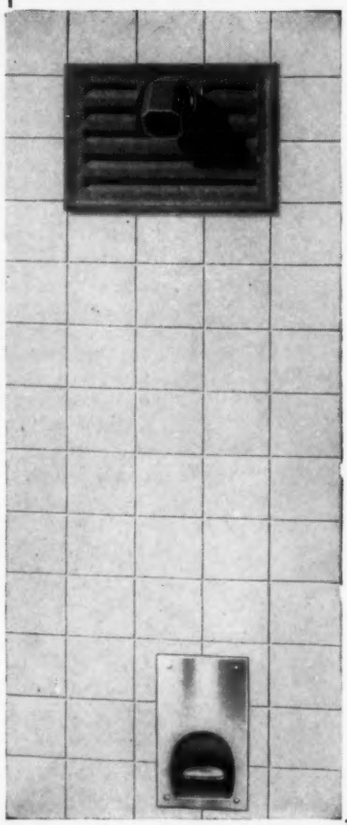
Visit space No. I-40 at NEA exhibit at Atlantic City.

No. 275 Shackle Lock (2/3 Actual Size)

National Lock Co., Rockford, Illinois

Progress FOR A THIRD OF A CENTURY

Announcing THE NEW "FR-W" MODEL SANI-DRI



"MORE THAN A DRYING SERVICE"

Suitable for installation in any wall construction 8" or more in thickness. Model "FR-W" SANI-DRI has been designed especially for school washrooms. Being full-recessed it conserves room space—the full-recessed foot-pedal provides greater safety and protects against accidental or deliberate damage.

Illustrated literature sent on request.

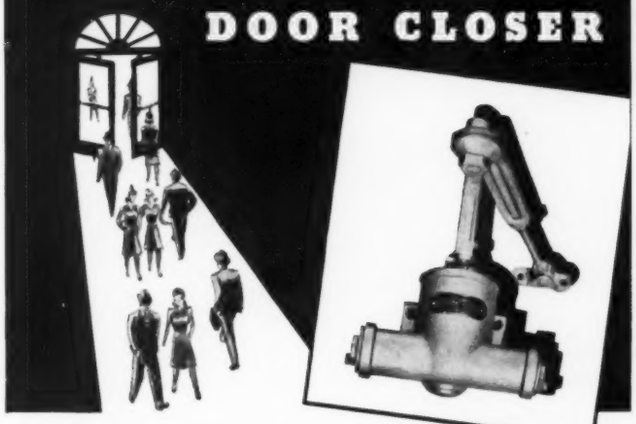
Dependable Since 1897

THE CHICAGO HARDWARE FOUNDRY CO.

Sani-Dri Division

241 Nation Street
NORTH CHICAGO, ILL.

NORTON DOOR CLOSER



LOWEST MAINTENANCE COST

Where traffic is heavy, in schools, institutions and public buildings, door closers must pass the supreme test. Administrators of such property are high in their praise of the performance and durability of Norton Door Closers. Mineral Oil Lubrication, without leakage, minimizes friction and wear. The Rack and Pinion principle provides positive control of the door all the way, which reduces strain on hinges and door. Readily adjustable to meet various operating conditions, the Norton Door Closer, with many exclusive features, solves any door control problem. Write for the Norton catalog.

NORTON DOOR CLOSER COMPANY

Division of the Yale & Towne Mfg. Company

2902 N. Western Ave., Chicago, Ill.

MEDART HIT PARADE

3

Write for Catalog

GOAL-HI AMERICA'S NEW Indoor & Out-of-Door PLAY GAME

America's new play-game . . . For girls — for boys . . . Played indoors or out-of-doors . . . For small teams or entire (large) gym classes or play groups . . . Only one inexpensive Official Goal-Hi Standard (and a ball) is required . . . Complete Rules Book free with each standard . . . "For health and fun and exercise, play Goal-Hi all year 'round." Complete information upon request.

Fred MEDART Mfg. Co.

3532 DeKalb Street St. Louis, Mo.

for less than 5 cents per hundred copies, according to the manufacturer. It reproduces eight colors in one operation and any combination of pencil, pen and ink or typewritten work. Sixty to 75 copies can be made per minute. Any sized sheet can be reproduced.

Photo-Chemical Printer

A. B. Dick Company, Chicago, again this year will exhibit the Mimeograph photo-chemical printer which was released just prior to the A.A.S.A. convention in 1940.

Floor Maintenance

Labor-Saving, Economical, Too

Midland Ev-R-Glo XX is a self-polishing wax that dries with a luster in about twenty minutes. The content of this product is entirely prime No. 1 yellow Carnauba, the hardest natural wax known. It contains no shellac, oil or petroleum derivatives. Although this product is highly water-resisting, it can be removed easily with nonexpensive materials. This is a product of Midland Chemical Laboratories, Inc., Dubuque, Iowa.

Floor Machines

Quiet Vacuum Machine

A vacuum cleaning machine said to be so quiet that it can be used in the building during school hours will be exhibited by Continental Car-Na-Var Corporation, Brazil, Ind., maker of Silent Chief floor machines and heavy duty floor finishes. The new machine is adaptable for either dry or wet pickup. A special nozzle with a squeegee inside gives 75 per cent more efficiency than an ordinary nozzle. The machine is run by a high powered universal motor with a multi-stage turbo fan.

To Celebrate 35th Anniversary

Finnell System, Inc., Elkhart, Ind., is celebrating its thirty-fifth anniversary with the biggest display it has ever presented to school administrators. The new 600 Series Finnell electric floor machine will have the spotlight, complete in five different sizes. A new hot waxing device for this 600 Series machine will share the honors.

Bent Handle Is Feature

A floor machine that really gets around is the new 12 inch silent machine, product of Huntington Laboratories, Inc., Huntington, Ind. An especially bent handle makes it possible for the custodian to get under many pieces of furniture. All gears are metal and need no additional lubrication. The machine has a heavy polished aluminum base, solid rubber wheels and a resilient rubber bumper. It carries a one year guarantee.

Electric Mopper Is Convertible

To protect your school floors and your investment in them, the Kent Company, Inc., of Rome, N. Y., has added a speedy electric mopper. Powerful suction picks up dirty scrubbing water into an easily emptied tank. No water is left to seep into the cracks. One man can move it about easily. By an exchange of tanks, the equipment turns into a powerful dry-dirt vacuum cleaner.

Janitors With Clean Faces

Two portable vacuum cleaners to be displayed by the Spencer Turbine Co., Hartford, Conn., are equipped with a new inverted bag filter which permits cleaning of the bag without its removal from the machine. The dirt is shaken into a pan and no dust flies up into the janitor's face. In the same exhibit Spencer Turbine will set up a stationary vacuum cleaning system as it would be installed in a school building.

To Show Edging Machine

Tedious handscraping and polishing of floors will not be necessary for school maintenance men once their administrator purchases an edging machine from G. H. Tennant Co., Minneapolis. The machine is equipped with a front light to illuminate dark work areas and with a free turning steel guard to protect baseboards from damage when floor edges are being sanded. Stairs, counters and desk tops may also be refinished with this implement. Paired with it in the exhibit space will be a floor machine for both cleaning and sanding.

New Line of Machines

During 1940 the Hillyard Sales Company, St. Joseph, Mo., installed its own foundry and machine shops and is now manufacturing in its own plants the Hiltonian line of scrubbing and polishing machines. Before 1940 this company purchased the machines and only jobbed scrubbing and polishing machines.

Furniture

Display to Show Actual Installations

American Seating Company, Grand Rapids, Mich., this year will exhibit the Universal and Envoy lines of classroom furni-

YOU ARE INVITED to taste and test ...AT OUR EXPENSE

SUNFILLED pure concentrated ORANGE and GRAPEFRUIT JUICES

establish a milestone in processing, packaging and quality achievement. They are true-to-fruit products at their best. Every food element and characteristic, natural to freshly squeezed Florida orange and grapefruit juices, are successfully captured and retained without recourse to adulterants or added preservatives.

Only a percentage of the normal water content has been temporarily borrowed . . . which, when returned by you, insures the same delicious flavor and consistency which Nature endowed.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

COMPARE THESE TYPICAL ANALYSES
(Note vitamin C retention)

	Orange Concentrate; per cent	Concentrate diluted with 9 parts of water by volume; per cent
Moisture	24.0	89.7
Total Solids	76.0	10.3
Ash	2.7	0.4
Protein	3.5	0.5
Reducing Sugars	26.0	3.5
Sucrose	31.3	4.3
Carbohydrate (by difference)	63.3	8.6
Citric acid	6.5	0.85
Calories	2.67 per gm. 76. per oz.	.03 per gm. 10. per oz.

Vitamins—Concentrate: 2.5 mg. ascorbic acid (50 international units Vitamin C) per gram. Concentrate diluted with water (1:9) 680 international units Vitamin C per 100 c.c. or 200 international units per fluid ounce.

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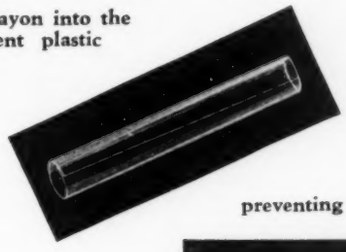

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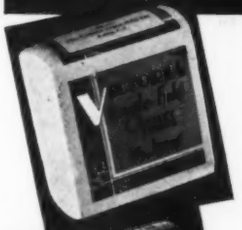

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MEDART HIT PARADE
4

Write for Catalog

BIKE RACKS FOR INDOOR AND OUT-OF-DOOR USE

Haphazard, dangerous and disorderly parking of bicycles has no place on or in school property . . . Medart Bike Racks solve that disturbing problem for all times . . . Hot galvanized throughout to resist rust, this modern and inexpensive school equipment may be used indoors or out-of-doors at will . . . fully described in the Medart Bike Rack catalog. Write for it.

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3532 DeKalb Street St. Louis, Mo.

ture. Additional units have been added to these outstanding lines of functionally streamlined desks and chairs since they were announced last year. Evidence of nation wide acceptance of American Seating Company's new school furniture will be shown by photographs of actual installations of Universal and Envoy school furniture in schools throughout the country.

In the auditorium chair line American Seating Company will show several new chairs, new constructions, new designs and at every price level.

"Lazy Susan" Up to Date

An ultramodern "Lazy Susan" has just been perfected by Bacon & Vincent Co., Inc., Buffalo, N. Y. The Bavinco home economics equipment designers will demonstrate in Atlantic City how for the first time every inch of space in a corner kitchen cabinet base is really usable, how every pot or pan kept on the two revolving shelves is right at the fingertips. Completely planned Bavinco unit kitchens come either in "U" or "L" shape.

News for Libraries

Four new items of library equipment will be displayed by Gaylord Bros., Inc., Syracuse, N. Y. These are (1) a streamlined charging desk for school libraries in modern interior design and having interchangeable sections; (2) a two purpose book truck with plenty of space for carrying books and with sloping shelves for special collections and displays; (3) oak or maple book ends to harmonize with desks, bookshelves and tables, and (4) a glass display section to fit on a card catalog case, suitable for small trophies.

Chrome Finished Tubular Furniture

To complement any type of architecture from Gothic to modern, Heywood-Wakefield Company, Gardner, Mass., recommends school furniture constructed from seamless steel 16 gauge tubing. A redesigned and refined line of tubular furniture will be displayed at Atlantic City with special focus on the popular polished chrome finish. Chromium plating combines indestructibility with smartness.

Chair Desk Redesigned

Restyling has been done on the movable chair desk made by the Irwin Seating Company, Grand Rapids, Mich. Convention goers will get to examine the sliding, disappearing door in the book compartment, which eliminates the need for using the book drawer for dustproof storage space. New unit classroom tables and chairs and an inclinable top sight saving table will be displayed.

Laboratory Equipment Aids

Here is what the Walrus Manufacturing Company, Decatur, Ill., lists as new: (1) a cast polished aluminum shoe for table legs on Walrus laboratory, vocational and library furniture; (2) a bronze aluminum, acid resistant finish on plumbing fittings for laboratory tables, and (3) a new acid resistant, waterproof, noninflammable finish.

Lighting

Artificial Light Sources

The 1941 exhibit of the Illuminating Engineering Society, General Electric Company, Nela Park, Ohio, will consist of the following lamps: (1) those for killing air-borne bacteria; (2) those for providing ultraviolet rays; (3) those for use in the laboratory to demonstrate phosphorescent effects; (4) electric discharge lamps of the mercury and sodium type; (5) illuminants suitable for general lighting, such as the inside-frosted and silvered bowl tungsten-filament lamps and fluorescent lamps.

Fluorescent *v.* Incandescent

Fluorescent light units satisfactory for use in standard and specialized classrooms will be displayed by the F. W. Wakefield Brass Company, Vermilion, Ohio. Actual figures covering the use of fluorescent equipment in school situations as compared with incandescent lighting will be posted.

Lockers and Storage Equipment

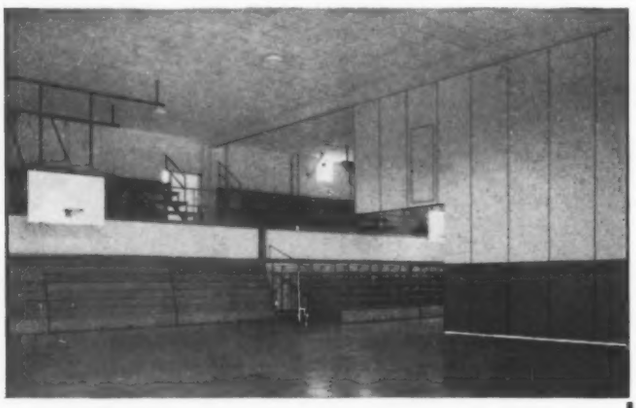
For Vocational Schools

Years of experience in providing industry with equipment for storing, handling, checking in and checking out tools will now be passed on to vocational schools by Lyon Metal Products, Incorporated, Aurora, Ill. A new locker drawing table, drawing board height, has a tilted top with locker space below. Too, there are tool cabinets with single faced tops and double faced tops. Specialized tool storage inserts for use in shelving or independently on counters are available to schools.

Locks and Builders' Hardware

Devices for Doors

P. & F. Corbin, New Britain, Conn., will display the complete line of hardware made



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especially for schools, including panic exit devices, locks and door checks.

Streamlined Locks

Attractiveness coupled with mechanical perfection is claimed for the streamlined locks to be featured by the Dudley Lock Corporation, Chicago. A fluted knob is easy to grip and dial points in black on stain chrome are quick to read, speeding up the opening operation. There is a master-keyed series, giving the administrator control of all or any group of locks by means of a single key. Combinations of built-in locks can be changed almost instantly without removing any part of the lock from the locker door.

Door Holding Equipment

Three new devices are the year's contribution to the school market of Glynn-Johnson Corporation, Chicago. These are: (1) two models of the dome type of bumpers, with rubbers that cannot be pulled or forced out and with a 1⅛ inch solid rubber cushion giving resiliency in absorbing the shock of the door; (2) a new overhead door holder, preventing doors from pulling loose or opening beyond the desired stopping point; (3) a floor type of holder for interior doors with all working parts encased; it is so designed that children cannot ride on the door or damage the floor plate.

Padlocks for Pupils

An inexpensive yet durable combination padlock designed for pupil ownership is self-locking. Without additional cost these padlocks can be supplied in sets with the same combination for corridor and gymnasium lockers. A chart comes with each order. It will be demonstrated to administrators in Atlantic City by the Yale & Towne Mfg. Co., Stamford, Conn.

Maps, Charts and Globes

Democracy Charts

A series of 20 wall charts, 59 by 38 inches, entitled "Democracy at Work," will be displayed by A. J. Nystrom & Co. They show graphically the forms and functions of political, social and economic democracy and are designed as a visual aid to teachers and learners as to what democracy is and how it works. Authors are John Guy Fowlkes, J. M. Gaus and E. E. Witte of the University of Wisconsin and L. E. Lubert and J. D. Hyde of West Union-Senior High School, Madison, Wis.

Political-Physical Maps

Most important of the year's contributions of Weber Costello Company, Chicago, are their new Reality Political-Physical Series of Maps and eight corresponding life and latitude charts. Maps represent the World, United States, North America, South America, Europe, Africa, Asia and Australia and the Western Pacific. Edith Putnam Parker, University of Chicago, is author.

Recreational Equipment

On the Use of Gymnasium Apparatus

The Fred Medart Manufacturing Co., St. Louis, will tie in its exhibit with the book just written for teachers by Gymnastic Coach Charles E. Miller of the University of Nebraska, which is now ready for distribution to school officials. "Physical Training—Practical Suggestions for the Instructor" proves that it is a fallacy that gymnasium equipment and apparatus are limited to the teaching of advanced gymnastics and that physical education work on apparatus is outmoded. Coach Miller is convinced that there is no substitute for apparatus work for thorough physical development of the entire body.

School Supplies

Keep the Eraser

The crowds at one triple booth at the convention are expected to prove the contention that Beckley-Cardy's "Little Giant Eraser Cleaner—Neverip Eraser" combination offer will be enthusiastically accepted by school officials. The improved Little Giant Cleaner and a dozen Neverip Triple-Sewed Blackboard Erasers are now being offered together at a special price. If the Little Giant doesn't prove satisfactory after a ten day trial, the full purchase price will be refunded and the buyer may keep the eraser for his trouble.

Ink Bottle Contains Pen Filler

The desk bottle of Higgins American Drawing Ink now comes equipped with a new type of pen filler guaranteed to take up more ink. This plastic pen filler is considered superior to the natural feather quill hitherto used because of its uniform length, diameter and thickness. It feeds more ink into a drafting pen with less trouble and

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MEDART HIT PARADE

6

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TELESCOPIC GYM SEATS

Originated by 'Medart' . . . Safe to use, safe to operate . . . An installation of Medart Telescopic Gym Seats assures absolute spectator visibility — an all important factor that will make your gymnasium pay a profit! Let us survey your gym and submit an accurate detailed recommendation. No obligation to you. Catalog upon request.

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greater accuracy than a feather quill. By February 22 Charles M. Higgins & Co., Inc., expects to have ready for free distribution to mechanical drawing instructors a 36 page booklet which will contain the nation's drafting standards.

Develops New Lettering Pen

The new Speedball Flicker Pens for lettering, manufactured by C. Howard Hunt Pen Company, Camden, N. J., are said to be the greatest advancement in drawing and lettering pens since the first Speedball Pen was developed twenty-five years ago. The feeders are hinged so that they swing open to be cleaned. The pens carry more ink and are made of tempered steel and have gold plated reservoirs to resist corrosion.

Typewriters

Featuring New Keyboard

Finger-Flow Keyboard, a recent standard typewriter improvement for faster, more accurate typing developed by the Royal Typewriter Co., Inc., New York City, is featured on all Royal Standard Typewriters to be exhibited. This new feature changes the shape of the important shift, back spacer and tabulator keys. These keys are now rectangular in shape on the new machines, giving greater stopping area, shorter finger spread and easier key contact.

For Keeping School Records

New and improved systems and machines to be shown by Remington Rand Inc., Buffalo, N. Y., at the convention are the following: Kolect-A-Matic, the modern vertical visible file for pupil history records; Safe-Kardex "60," new "point of use" fire protection for vital school records; Dupliscope, "lumline" illuminated drawing board for preparing duplicator stencils; Remington electric automatic balance bookkeeping machine; Remington Rand printing calculator, and Remington standard, noiseless and portable typewriters.

Window Shades

A Shade That Swings

Something new at the convention in the way of window shades will be the Forse Swing-Way Duo-Roll shade, manufactured by the Forse Corporation, Anderson, Ind. This shade has a streamlined metal center section that is pivoted so it can be swung away from the window without inconvenience. The shade is made of a sunfast preshrunk, wearproof fabric; it has noiseless lock pulleys with Bakelite rollers and pressed steel frame, oversize slats and cord pulls with double anchorage. The entire equipment is covered by a lifetime guarantee.

Signaling Systems

An up-to-date and efficient signaling system for schools will be exhibited by the Holtzer-Cabot Electric Company of Boston. The equipment will demonstrate four basic systems; fire alarm for safety, clocks for punctuality, laboratory panel equipment for flexibility and sound distribution for audio-education. The H-C signaling system is the culmination of years of experience of a company that has pioneered in this field.

Vocational Education Equipment

New Composing Room Equipment

Last summer the American Type Founders Sales Corporation, Elizabeth, N. J., brought out a complete new line of cabinets and other composing room equipment especially designed for schools. Among other things, this company will exhibit is its new hand-operated book-binding unit for small junior high schools. This company invites school executives to write for suggestions as to equipment and supplies for instruction in the printing arts.

Miscellaneous

New Eye Movement Camera

To assist teachers of reading, the American Optical Company, Southbridge, Mass., has announced a new eye-movement camera. This ophthalmograph automatically produces within itself a fully developed, identified film eight minutes after the reading test. The film, or reading graph, reveals speed of reading, span of word recognition, eye coordination, fixations, regressions and eye habits associated with psychological reactions. Another development of this optical concern is a Junior Metronoscope to improve reading efficiency. It is a triple-shuttered, short exposure device that compels reading in a rhythmical left to right sequence.

Greaseproof Asphalt Tile

The building materials division of the Armstrong Cork Company, Lancaster, Pa., has announced the perfection of a greaseproof asphalt tile which also is alkali-resistant and is available in 21 colors.

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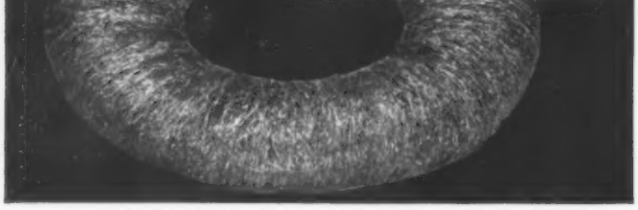

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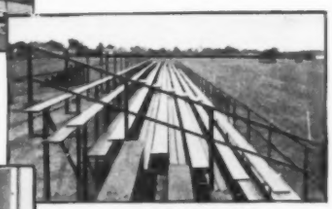

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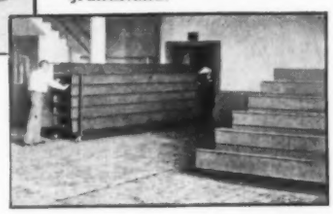

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● From papers presented at the A.A.S.A. convention, February 24 to 28.

Side Glances—

APRIL promises showers of good reading. From our next number we recommend "Dayton Schools About Face," "A Commencement Designed to Interpret the Pupil," "The Fine Art of Firing," "Changing from a K-6-3-3 to a K-6-4-4 Organization" and 16 pages of suggestions on "Summer Renovation."

ARCHITECTURAL emphasis will be given a rural consolidated school in Connecticut and a high school auditorium and community center in the state of Washington.

DR. ROSS L. ALLEN, managing executive of the American Camping Association, informs us that we were in error in our February issue. He says: "The American Camping Association had no part in the sponsorship of the Schwert Bill (H. R. 10606). In fact, we did not know anything about the bill until it had been introduced and published in printed form. We were not consulted about the bill. The American Camping Association has not taken any official stand on the bill." The inclusion of the American Camping Association in the sponsorship of the Schwert Bill was based upon reports from usually reliable news sources. We accept Doctor Allen's statement as a specific correction.

Owing to an error in typing the subvention proposed in this bill was listed as $100,000,000 instead of $200,000,000, which is the amount to be available at the end of 1945.

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Vierling Kersey ... *Los Angeles Public Schools*
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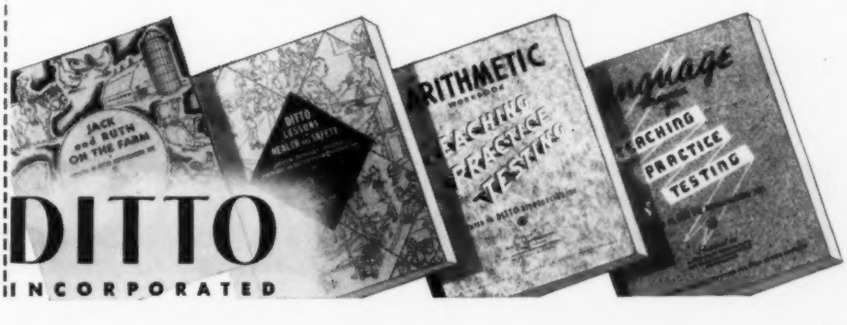

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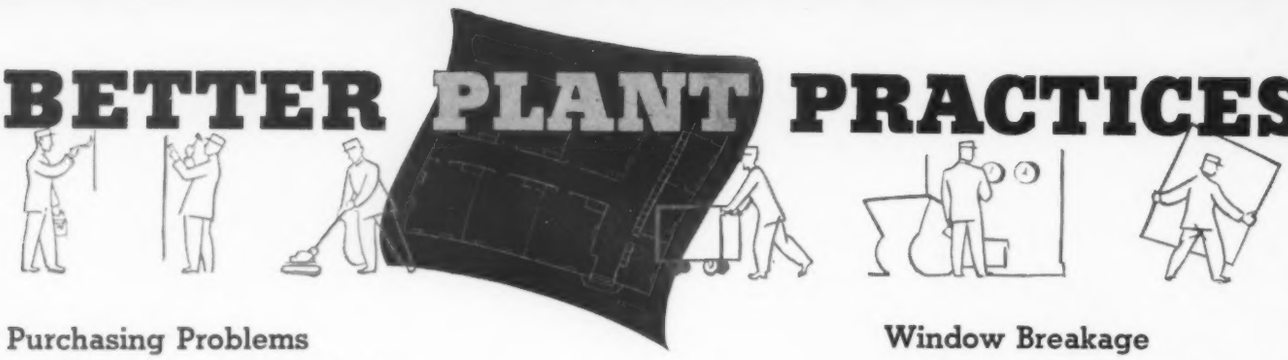

Purchasing Problems

What effect is the national defense program and the war situation having upon the costs and procurement of school supplies?

The question is a vital one to every school business official. A checkup here, there and everywhere discloses the general feeling that the items most seriously involved will be hardware and tools, steel products, mechanical drawing instruments, paint brushes, sewing machine needles and possibly some items of paper and cloth. However, it is generally conceded that practically all products used in schools can eventually be obtained from domestic sources. The price trend will be upwards as it has been for several months past.

That there is great need for school officials to anticipate their needs well in advance seems to be the general consensus of opinion. Discussing the problem recently, Clyde S. Yerge, director of purchasing, Oakland, Calif., stresses this point particularly, adding that he does not feel that quality will be greatly affected. He suggests sufficient increase in inventories of nonperishable materials so that the educational program will not be seriously hampered.

Wool items, such as blankets, and some chemicals are among the products that may cause embarrassment, although domestic sources should be ample and able to supply most needs, he believes.

"Price trends will probably be moderately upward for paper, tools, some chemicals and possibly lumber, principally because of increased production costs. The government is endeavoring to organize itself with regard to consumers' goods to prevent excessive rise in prices," states Mr. Yerge.

Other opinions will be presented next month.

Window Breakage

Window breakage is not a serious problem in a community such as Wilmette, Ill., in which the children come from comfortable homes. Usually, the parents are glad to help pay or have the children pay for any intentional damage. The expenses of accidental damage are borne by the board of education. Glass replacement costs about $93.16 for seven buildings and two houses used as offices.

"We have made no study of the problem," according to Mabel I. Park, business manager, "because, where we have most of the breakage, the answer is obvious: small play area, too close to the buildings. However, even this is not serious until the baseball season.

"We endeavor to arrange the diamonds in such a way as to avoid these accidents and we appeal to the children to be as careful as possible. If damage is done purposely, which is not often, we

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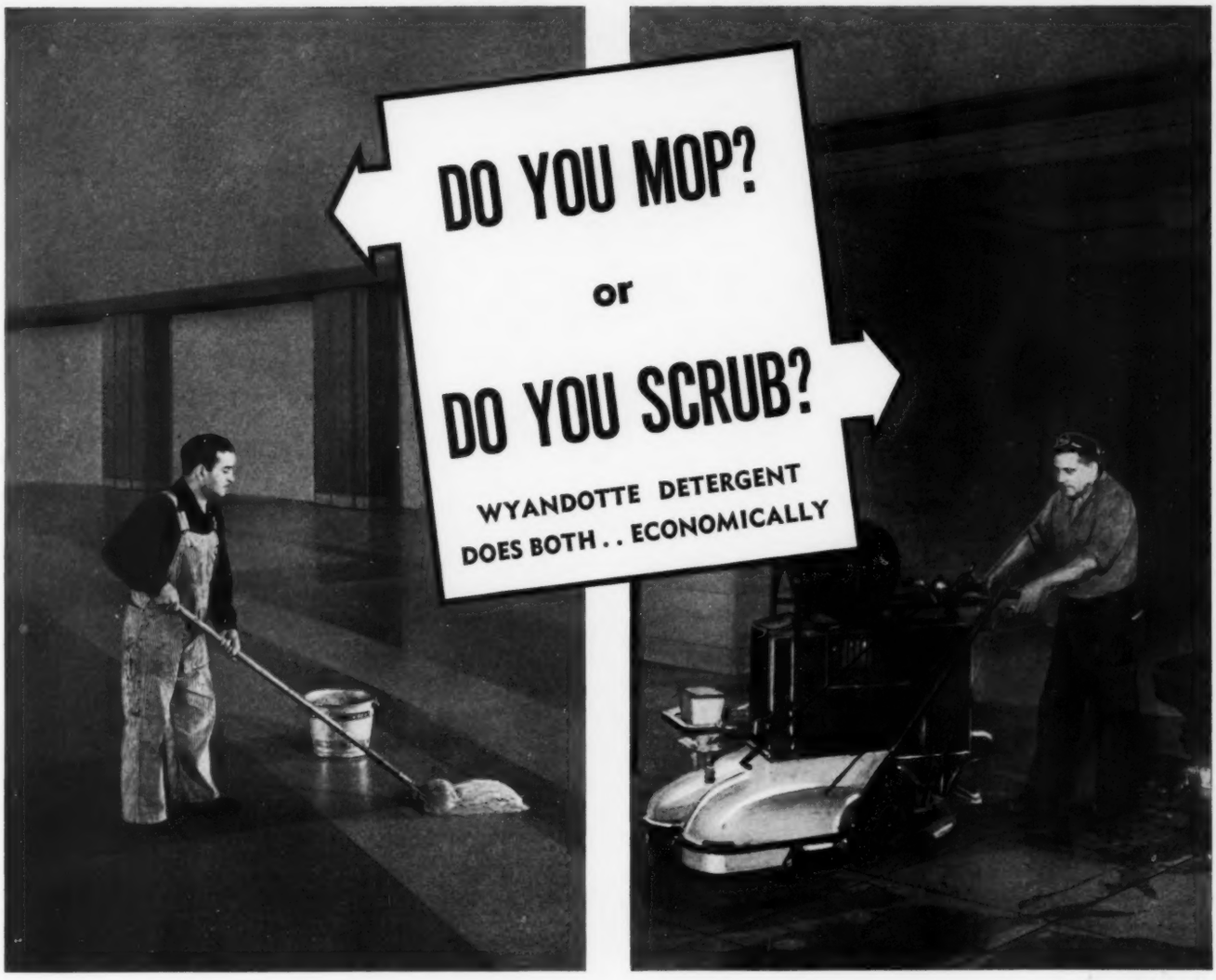

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send a bill for installing new glass to the child's parents. When damage is done in the evening by older boys, we try to learn who has done it and get them to pay the bill. This does not happen often."

Discussion Meetings

These take place between the superintendent and principals, the principals and the teachers, and the teachers and pupils and constitute one way by which the board of education in Atlantic City, N. J., is hoping to cut down on window glass breakage. The annual cost of such replacements the secretary, H. H. Young, lists at $501.80. This is caused by ball games and also epidemics of malicious destruction which break out now and then. In addition to the discussion meetings, diamond mesh wire screens have been installed on many windows to prevent breakage.

Three Solutions

(1) To build no more schools with windows of large panes of glass; (2) to use wire glass in basement windows and in windows near outside fire escapes; (3) to step up the teaching of appreciation and respect for public property.

Having listed these in the order named, W. A. Pillans, business manager, board of education, Lorain, Ohio, elaborates upon the last mentioned. "Our schools this year have adopted 'The Code of the Good American,' formulated by our pupils themselves. A framed copy hangs in each schoolroom. One of the tenets of this code is 'The Good American obeys the laws and respects authority.' I believe our schools can do much to take the so-called 'softness' out of our civilization by requiring boys and girls to give a little more of themselves in return for all the fine things the schools are giving to them.

"Last year," Mr. Pillans adds, "the cost for glass replacement was $238, or slightly under $16 per building per year. We have one high school, four junior high schools and 10 elementary buildings. Fully 75 per cent of this cost is over and above ordinary wear and tear. In other words, we spend on the average about $180 per year, or $12 per building, because of the primitive instinct of some young Americans to heave a rock through a window, particularly a schoolhouse window.

"I have often thought that the epidemics of school window breaking that occur in most cities might be traced, in some cases at least, to a revengeful attitude toward a teacher, the principal or the school custodian. We had one instance of this. In another instance, I know we were guilty of furnishing the ammunition, since we filled in a part of a school playground with gravel."

Removing Temptation

"Steps should be taken with a view to removing from the neighborhood piles of stones and other materials that are contributing causes." This is one of the ways by which New York City is trying to reduce window breakage. The cooperation of principals and custodians is being sought.

"Custodians will be of assistance to principals," a recent bulletin points out, "in getting data as to the number of panes broken, the time of the year when breakage is greatest and suggestions as to causes. It is suggested that a weekly or monthly record be kept with a view toward showing improvement. In some localities the aid of groups of children can be enlisted in helping to protect schools."

Despite the fact that more than 125,000 panes of glass were broken in New York City schools last year, it must be remembered that this represents only a small percentage of the millions of panes of glass in school buildings throughout the city. The record is not as bad as it appears.

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LOOKING FORWARD

Let the People Know

THE public school has three general responsibilities: conservation, transmission and improvement. In common with other human agencies it has a tendency to emphasize the conservator value, thus producing what is frequently called an "academic set." Until recently emphasis has been placed upon execution or operation to the neglect of comprehensive planning and appraising; this accounts, in part, for the academic nature of our schools.

Our ever changing democratic culture demands that its public schools be ideal in outlook and dynamic in practice. Care must be taken to recognize the inevitability of change. During periods of comparative calm it is easier for the school to make rational adjustments in "institutional lag" than during times of stress. Certain pressures develop during emergencies that strike violently at institutions and social agencies. The current emergency is one of those periods.

Emergencies are currently used by individuals and groups who have pet notions for improvement of conditions and also by those in opposition to existing practices. Some of these pressures grow out of a selfish will to power while others represent honest convictions. It is necessary to distinguish between the two.

These pressures include attempts by conservator groups, such as the D.A.R., to struggle against changes from their rosy-hued dreams of the past. They include attempts by some religious groups to use the schools to bolster their particular sectarian beliefs. The pressures will also include attempts by economic interest groups, such as the U. S. Chamber of Commerce and its affiliates, to whittle down the educational opportunities of youth. These attacks are nothing new but they will increase in virulence.

A typical representative of these groups is Merwin K. Hart, president of the New York State Economic Council, who recently proclaimed: "It is time to brush aside this word 'Democracy' with its connotations." Only a year ago a special representative of the U. S. Chamber of Commerce calmly outlined to me plans for cutting the educational budgets in every state. These are the groups that enthusiastically support all major plans for external defense while seeking to curb the greatest agency for the preservation and improvement of democracy—community-centered public education.

Propaganda of these types can be met and neutralized. Professional associations and members of boards of education should bring every such effort into the spotlight of complete publicity, showing motive, organization, support and method. Let the people know. Bring the issues into the open. The best means of counteracting propaganda is to build an informed opinion against it. It is vulnerable.

Physical Education

STRONG, healthy men and women are essential to a virile nation. The total national defense program has placed additional emphasis upon physical rather than upon military training in the secondary schools. The best contribution the schools, except those on the advanced level, can make to current national defense is to build healthy individuals through a balanced program of exercise and recreation.

There are certain imbalances in the physical education division of the curriculum that need early correction.

At the beginning of the World War physical education was just emerging from an experimental period, motivated by three major influences. The first was the German Turner influence. The Turner program in the United States from 1848 until 1917 overemphasized calisthenics and heavy, formal apparatus work. The second, the Y.M.C.A. plan, provided better balance between formal gymnastics and play. The third influence, the American free play movement, also grew up outside the school.

The first effect of the war was to belittle the Turner movement and to point heavily toward free play. While this tendency was noticeable chiefly in urban centers, its influence soon spread to smaller communities. The outcome was increasing emphasis on team play, which culminated in overemphasis on winning championships. It was easy to attract a profitable gate to see a winning team but more difficult to obtain sufficient appropriations for a well-balanced instructional program. Most school executives took the easy way. Playfields were preempted by "varsity teams" and gymnasiums were given over to basketball exhibitions.

Overemphasis on winning championships resulted in the unfair and dangerous exploitation of the physically capable youth and balanced physical education programs for all pupils were reduced to a minimum.

During the last ten years expensive gymnasiums have been built primarily for championship exhibitions and not for the use of all the children. The average secondary school pupil today enjoys not more than two hours a week in the gymnasium and the rest of the time these expensive facilities are idle. Although no conclusive data are available, it is our estimate that secondary schools are almost 30 per cent understaffed to provide physical education for all.

There is a tendency to return to a program in which correction of physical handicaps and formal gymnasium work for general body building will be in balance with free individual and group play. However, the tendency is still too slight to reflect a specific trend. There is no implication that free play is undesirable or that the schools should return to a heavy apparatus program but, in addition to play, there is need for a sound gymnastic general body building program in every secondary school. This means that gymnasiums should be equipped with something more than a basketball court and spectators' bleachers. It is even more important that each pupil enjoy at least five hours weekly in physical education instead of the conventional two, which is the dominant practice at the present time. Sane balance, with declining emphasis on championships, is the great current need in physical education.

Lucy Brennan

AFTER forty-three years of service, Lucy Brennan, an elementary teacher in P.S. 47, New York City, was retired from active teaching in 1938 without the fanfare of publicity that marks the specially titled job. It was just routine for her to slip quietly from her desk into retirement. There is a real story under these surface details. We think it is worth telling:

Lucy Brennan was a master teacher who will live long in the memories of many of her pupils. As an idealistic girl she entered teaching because to her it was a high and noble art to work with boys and girls. In her own words: "Teaching wasn't drudgery. It was life. I'd have wanted to teach if the pay had been $3 a week."

She realized early in her long career that the lasting satisfactions in teaching grow as the teacher loses self to live again in his handiwork. Without this vision, teaching is just another job.

She found in the boys and girls who sat in her classes many of unusual promise but of limited means. Strong in the belief that America needs the services of all who can contribute and that lack of finance must not stand in the way of individual opportunity, Lucy Brennan carefully planned the second phase of her teaching. She considered herself only as the steward of her salary. It was her duty to share with others. Her wants were simple and deliberately kept so. All monies beyond small personal needs were funded to help those who had ability but no means. Lucy Brennan was of Irish descent and a devout Catholic but she respected character and brains above all things and had strong tolerance for the beliefs of others. Whenever she found youngsters of promise, Catholics, Jews, Protestants, native Americans, immigrants or children of immigrants, she proceeded to point them toward the limits of their possibilities. They were urged to remain in school when it meant sacrifice to the family to keep them there.

After they had finished secondary school, she financed their college training from her slender savings. During her lifetime she has helped 67 boys and girls through academies, colleges and universities. They have not forgotten. Her protégés now include doctors, judges, teachers, nurses, scientists and engineers, many of whom have made enviable records. When they offered to repay her efforts, she waved them aside with the suggestion that they go out and find others who were worthy and pass the gift along. The first splash of the stone has created many ripples.

To save more money to help others, Miss Brennan went to live with the nuns at Our Lady's Institute twenty years ago. Here, although now on limited pension, she continues her interest in "her children" and in September 1940 provided for the sixty-seventh student, obtaining for the girl a tuition scholarship and furnishing the clothes herself.

Lucy Brennan is a teacher of whom her city and her nation may well be proud. She is not alone. There are in public teaching service today thousands of Lucy Brennans who find their greatest and most lasting satisfactions in giving to others, in searching out talent and encouraging it, in sharing their slender means to help those less fortunate. They do not beat drums, blow trumpets or seek the glare of publicity but they are delicately modest in their natural reticence and are discovered only after careful search.

Modern Furniture

THE trend is toward a more dynamic school. Every organization will be faced with the need for change in organization and methodology to meet these new conditions. Thus, it becomes doubly important that, in considering furniture for current and future use, special attention be given to discernible trends so that furniture and instructional purpose may be in relative harmony.

The type of furniture used in classrooms, laboratories and shops should grow out of the instructional pro-

gram. Purpose, methodology and organization will normally determine the form as well as the specific use of equipment. Too frequently, school furniture is bought by the catalog in terms of cheapness and with little regard for instructional needs.

Quality in furniture may be obtained by purchasing in terms of sound specifications. Good furniture may be appraised instructionally on the basis of at least nine factors, the first of which is movability. Changing organizational practice makes fixed furniture undesirable except in laboratory and shop. The greatest degree of movability may be attained through individualizing furniture. Multiple seating still has certain advantages but these are confined to special conditions, such as library work or work in laboratories and shops. For all classroom purposes individual units provide greater flexibility.

Children within instructional units do not come in standardized sizes, a fact that creates the need for adjustable furniture. Physicians and physical educationists agree that modern furniture should be designed to provide comfortable seating and to encourage good posture. The more conventional the instructional organization, with its long periods of uninterrupted use of furniture, the greater is the need for furniture designed for correct posture.

The eyesight of the child and youth needs protection in both conventional and progressive schools, a factor that may be satisfied in several different ways. Furniture design may affect vision. Clear vision in classroom, laboratory and shop furniture is desirable from the instructor's point of view as well as from that of the class. It makes multiple use of a laboratory possible.

The educator frequently must be content with poor furniture that is not completely satisfactory even during its short life. This condition is the inevitable result of price buying. Quality is another essential factor in appraising school furniture. It may be obtained by writing specifications in terms of instructional needs. Price buying is an expensive luxury for public schools.

Until a few years ago material used in school furniture was limited to wood or wood with metal brackets and braces. Recent advances in the production of metal have increased the range of materials available. The future may see additional choice of materials, such as plastics.

Finally, the satisfaction of a physical and material need fails of its real purpose unless it is beautiful. The two fundamental criteria of any agency, be it house, school, factory, furniture or book, are, first, how efficiently it satisfies the purpose for which it was designed and, second, the degree of beauty with which its purpose is expressed. There is no reason for buying ugly and poorly designed school furniture. American equipment manufacturers are paying more attention to good design than ever before.

Advertising—II

AN OBSERVER at the national meetings of both administrators and public school business officials cannot help being impressed by the eagerness of the delegates in viewing the commercial exhibits. The repeated trips of these men to the different exhibits are not the result of mere curiosity or the natural American desire to collect souvenirs but are evidence of a real interest in the essential physical and mechanical auxiliary aids to the instructional process.

These annual meetings combine the exchange of professional and technical ideas with the opportunity of seeing improvements in supplementary adjuncts whose quality determines to a considerable extent the degree of instructional efficiency the administrator can achieve. Both aspects of a convention are essentially advertising.

In a large sense the specialized professional magazine duplicates the annual convention twelve times a year in presenting the same combination of activities to its readers that they so eagerly seek at meeting time. The heightened and stimulated visual interest of the magazine is supplemented by recurrent presentation and by more explanatory detail than is possible under convention conditions.

The thoughtful and progressive educator has long since reached the conclusion that the advertising section of his professional magazine in many respects is as important a means of education as is the professional textual material. The attractively presented products, essential to good housing and instruction, offer him an easy means of maintaining contact with progress in the production of essential materials. Spot surveys indicate that professional interest in well-written advertising is almost as high and as constant as in the technical textual material. Readers like the regularity of presentation and the cumulative reference value of these presentations through periodic indexing.

Educational advertising is valuable to both reader and manufacturer. It is one of the sensible means by which the market is brought closer to the buyer and the buyer given continuing contact with a changing market. This advertising is essentially productive in character and through its extension of market, in competition with other products, increases the possibility of use and represents a potential savings to the community in time and frequently in money. Over a period of years educational products have increased steadily in quality and have decreased in price. Much of the credit of this increase in dollar purchasing power must be attributed to the educational value of recurrent monthly presentation of products.

The Editor

How a Rural School Can Be

THERE are new rural schools being built every year to replace those that have been destroyed by storm or fire and those that have been allowed to become so dilapidated that it is cheaper to build than to repair. The tragedy is that replacements are seldom better planned in terms of educational needs than were the original buildings.

The unsatisfactory nature of the educational provisions in the small rural schools of the nation and the disrepair of the buildings are apparent to even the untrained but interested layman who observes such schools when business or pleasure takes him into rural communities. The common excuse for not improving the building facilities and for not making necessary repairs is that some day there probably will be consolidation. Yet school generation after school generation are the victims.

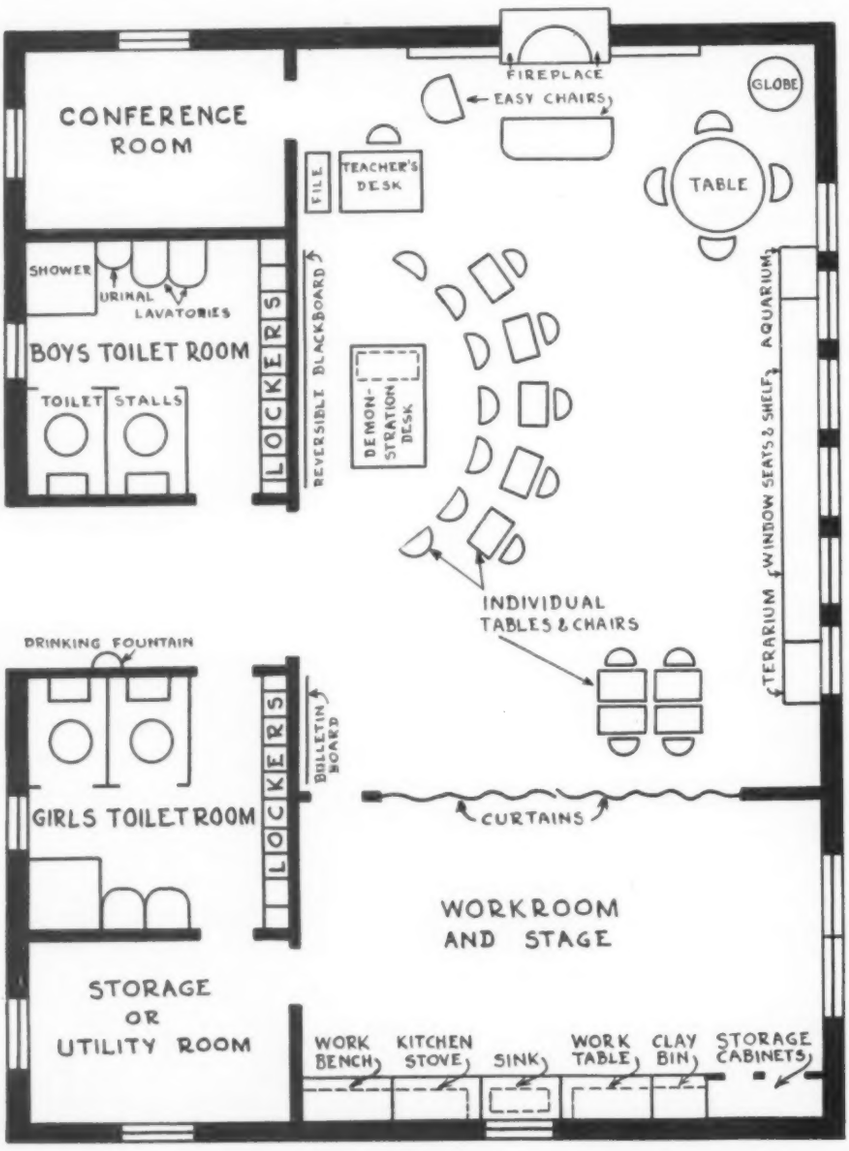
Unless a definite date has been set for consolidation and unless that date is close at hand, the present and even future school generations should not be denied that great American birthright, a well-rounded education made possible by the provisions of well-trained teachers and satisfactory building facilities. Children are given only one education and it should be a good one.

The model plan shown is intended to be suggestive to those who are building new buildings and to those who contemplate modernizing old ones. If consolidation is either contemplated or an ultimate possibility, this factor should be taken into consideration. All items of movable equipment can later be used in a consolidated school. Such items of permanent equipment as drinking fountains and toilet and lavatory fixtures can be incorporated into a larger building if they have been carefully selected.

It is even possible to move one-room school building units, if they are properly planned, to a central point and have them form the basic part of a new central school. These factors should be kept in mind in planning new rural schools and in remodeling old ones.

If any building is to serve its purpose effectively its planning must be functional. A rural school is not fulfilling its purpose if it is not utilized as a community center. It should, therefore, be planned in terms of community and educational needs.

The first point to consider, therefore, concerns the general services that are to be provided and the facili-



Left: This sketch suggests ways of facilitating the wide range of educative activities so essential in a modern educational rural program. The workroom can have a slightly raised floor, thus making an ideal schoolroom stage. Curtains between the workroom and the main room should be soundproof. The furnace room can be placed under the stage and can be reached from the storage or utility room. The conference room can be used by small groups and as a rest room for the smaller children or it can be equipped as a kitchen for the preparation of hot lunches. By using an archway this room can be developed as a library nook. By shifting the main entrance this room could be doubled in size and made into a combination studio-living room and kitchen and could thus serve as a teacherage. By using movable desks and chairs a maximum of seating flexibility is achieved.

Made a Model Workshop

EARL F. SYKES
Pennsylvania State Teachers College, West Chester

ties that will be needed. Toilet, lavatory, drinking, heating and lighting constitute the basic services. There is little excuse for rural schools not having modern toilet, lavatory and drinking facilities. These should be planned so that they are readily accessible to both the schoolroom and the playground. Often schools are so poorly planned that pupils, when coming in from the playground, have to cross the schoolroom to reach lavatories and toilets.

Running water will be needed but that can be provided by a well and a pressure tank. Many inexpensive models are available operated either by electricity, gas motor or by hand. There need not be a sewer connection as a well-planned septic tank and cesspool or field drainage system will operate fully as well and often with less expense.

Electric lights are essential if the building is to be used as a community center. As a result of rural electrification projects, many rural communities either have or will soon have such services. A depressing sight is the rural school with an electric line going right past it without any of the services it might provide, electric lights, water system and radio. Rural schools that are not on power lines can have their own farm lighting outfits.

Oil burning modified air conditioning heating units provide the most satisfactory type of heating system for the rural school. For old schools that do not have basements there are oil burning circulating heaters; these are clean and keep a uniform heat.

No matter what type of heating system is used, provision should be made for running hot water. Nothing makes the teaching of proper health habits more difficult than the absence of warm water. During the most of the school year this can be achieved by a simple hookup with the main heating unit. Automatic fuel oil and kerosene burning heaters can be used the rest of the year.

Facilities will also be needed for the preparation of hot foods for school lunches and community gatherings. A sink with running hot and cold water and an electric, a gasoline pressure or a kerosene stove are required. An electric hot plate can be made to serve.

When the Reek School, District No. 6, Town of Linn, Walworth County, Wisconsin, was remodeled recently it was refurnished with movable desks.

In order to plan a schoolroom that will fulfill educational needs it is necessary to think in terms of the types of educative activities that will be carried on there. Under the traditional educational program the major type of educative activity consisted of the combination of individual study and class recitation. For this purpose individual seat and desk units, which could be kept far apart and in permanent order, constituted the major consideration.

There was a time when for supervised mass practice it was deemed necessary to have enough blackboard space so that every pupil could work at the board at one time. As a result, school life was made still more dreary by a belt of blackboard surrounding the room. There is still a need for a small amount of blackboard space for demonstrations. But the blackboard need not be black; it may be green, yellow or even white, and it may be reversible with bulletin board surfacing on one side so that the blackboard area can be reversed when not in use. Large amounts of bulletin board space upon which to display pupils' work and a wide variety of educative materials have become an essential in the modern school.

Another type of activity consists of a variety of demonstrations for which there will be needed a small section of blackboard and a fully equipped demonstration table or desk. This desk should be equipped with an electrical outlet, a small sink and running water. There will be occasions when the teacher wishes to hold an individual and private conference with a pupil while the others are working. For this purpose the teacher's desk, placed in a quiet corner of the room, and a filing cabinet in which she can keep individual

folders containing records regarding each pupil and samples of his work will provide a desirable combination.

Then there will be occasions when a pupil will be doing reference work or recreational reading. For this purpose a quiet corner or alcove equipped and decorated as a library nook will prove indispensable. A fireplace at one end of the room will provide the right atmosphere for a story hour and for many other school and community gatherings.

Dramatization constitutes another general type of educative activity for which there is seldom adequate provision. In addition to a wide variety of school and community programs and plays, there are many occasions in which dramatizing will make history and literature meaningful and more interesting. For this purpose a section of the room, which can be cut off by curtains and used as a small stage, will be useful.

If this section of the room has a slightly elevated floor, it will be more like a stage and will assure that those in the back of the room can see without getting "stiff neck" or standing up. Such an arrangement can be made more effective by providing a simple type of stage lighting equipment.

The modern educational program, in providing for a wide variety of educative activities, includes some that are manual in type and are distracting if carried on in the same room with other learning activities.

By providing heavy soundproof curtains, that portion of the room that serves as a stage can also be used as a workroom for the noisy activities. To serve effectively in this capacity this area should be equipped with a work bench, vise and tool rack or chest; sink and running water; work table; clay bin, and storage cabinets.

The old schoolroom, with its rows of fixed desks, permitted only one type of educational program, consisting chiefly of passive memorization and recitation of lessons. The fixed seat belongs in the same category as the slate, the major difference being that desks last much longer and are, therefore, harder to discard. Individual table and chair units permit a greater degree of flexibility than any other type of seating equipment.

Nervous exhaustion and irritability of both teacher and pupils are the result of attempts to carry on a modern program of education in a room that has not been acoustically treated. Efforts to make schoolhouses fireproof and sanitary have caused the use of construction materials that have high sound-reflecting qualities. In most schoolrooms this defect can be corrected or avoided and the room made sound-comfortable by acoustical treatment of the ceilings alone.

The application of sound-absorption materials provides an economical way in which to rehabilitate old and defective ceilings. The expense involved in tearing off old plaster and replacing it with new, together with the accompanying dirt and grime, may be eliminated by the application of panels of sound-absorption materials directly over the defective plaster.

The classroom of a generation ago was a dull, drab and barren place. Many schoolrooms today are not greatly different and fall far short of providing a satisfactory environment for growing boys and girls. They provide an atmosphere closely akin to that found in our penal institutions.

Such a situation is not only harmful but unnecessary. The schoolroom should reflect the personality, interests and attitudes of those who live there. A classroom can be decorated with an interesting color scheme and with window curtains to create an atmosphere of happiness, refinement and beauty.

The schoolroom is not a crypt and should not be symbolized by the absence of living things. An aquarium, a few plants and other growing things help to create a satisfying environment. Under a modern program of education the schoolroom takes on the air of a laboratory or workshop offering many opportunities for adventure and for living. Children today are expected to live full and varied lives in school. The rural as well as the urban school should be planned to foster such living.

An All-School Exhibit

LLOYD W. ASHBY

Principal, David Worth Dennis Junior High School, Richmond, Ind.

THE Dennis All-School Exhibit of David Worth Dennis Junior High School, Richmond, Ind., held in May 1940 was the result of a year of planning. Faculty and pupil committees were set up a year in advance and all who participated in any way were fully aware of the purposes and objectives of the exhibit before school started in September 1939. The parent-teacher association cooperated by building the May meeting of that organization around the school exhibit.

Since plans were thoroughly made in advance a last minute rush to prepare materials was avoided. Teachers in all departments were requested by the general committee to preserve suitable exhibit materials that were the natural outcomes of regular school work. Stress was placed on materials of a type that would interpret the work of the school to school patrons. No materials were to be prepared for exhibit only. The art teacher, for example, collected and mounted her materials as the year progressed; thus, it was a simple matter to exhibit the art work at the close of the year. Other departments followed a similar plan.

A boys' cooking class planned, prepared and served refreshments the night of the exhibit. This proved to be a popular feature of the evening. Five hundred interested patrons and friends came to see the work the school was doing. While the exhibit was open for three days, emphasis was placed on the one evening program, which was entirely informal. Patrons milled about, visited and examined the exhibits. Teachers and patrons alike felt that the exhibit was eminently worth while in promoting a healthy community spirit and in helping to interpret the work of the school to the community. The spring music festival, held shortly before the exhibit, presented the work of that department. The exhibit also provided a cooperative activity in which many participated, sharing the work, the anticipation and the pride of accomplishment.

Federal Controls Endanger Community Schools

ARTHUR B. MOEHLMAN

COMPETITION from federal sources threatens the continuation of our democratic folk-made system of public, community administered education. Emotional demands and pressures developed during emergency periods strike at social agencies with violence.

The current emergency is one of those periods for public education. Demands by professional and lay interest groups may be too quickly enacted into statutory requirements under the plea that "it is necessary for the common defense." Once enacted, direct competition from the federal government with its tremendous resources, prestige and indirect power through financial subventions will become a most dangerous threat to our classless one way system of public education. Unless these problems, which grow out of inertia and lack of vision, are faced promptly and intelligently by the teaching profession and the people, competing institutions will quickly develop.

Creation of Parallel Systems

Competition from federal sources is of two types: (1) controls established and constantly enlarged within the existing system through special subventions and (2) the creation of independent parallel systems.

The first, represented by direct federal appropriations for instruction through the Smith-Hughes and George-Deen acts, already has resulted in actual federal control of the general and detailed practices of vocational education. In fact, since July 1940 the major efforts of the U. S. Office of Education have been devoted to strengthening and elaborating these controls. Federally subsidized vocational education is today no longer under community control but is dominated by the personnel of the Washington bureau, connected in turn and maintaining its power through the powerful lobby of the American Vocational Association. Carried to a logical conclusion, these controls mean the end of our classless concept of public education.

The fact must not be overlooked that the group of vocationalists who pushed the original Smith-Hughes Bill through Congress desired to set up a separate and independent school system. They were unable to accomplish their purpose in the 1917 bill but subsequent bureaucratic interpretation of these federal acts has practically produced the desired result. The appointment of state directors is controlled indirectly by the Office of Education. The state programs are determined in great detail by the federal office.

These controls became so obnoxious that President Roosevelt appointed the Advisory Committee on Education in 1936 to investigate the operation of the act. The recommendations of the committee (see H.R. 6157) for reform of the Smith-Hughes and George-Deen acts have never been acted upon because of the opposition of a powerful pressure lobby, the American Vocational Association, which is controlled indirectly by a small group of vocationalists in the U. S. Office of Education. It should be recalled that vocational education was placed under the commissioner of education in 1933 to correct some of the worst features of growing federal control. Instead, the vocationalists appear to have "taken" the Office of Education.

Funds Are Further Controls

Further controls have been set up in current emergency appropriations. All equipment purchased under this act remains the actual property of the state board of vocational education instead of resting with the community school for which it is purchased, a significant trend toward centralization of authority. At the current rate of increase in controls the present subsidized federal program of vocational education will produce within a few years a gravely distorted secondary education curriculum.

Additional or proposed internal controls of large portions of the instructional program were contained in two bills placed before the last Congress. The first of these was the perennial National Education Association Omnibus Bill, the direct descendant and successor of the much discussed Harrison-Thomas-Fletcher Bill. It will probably be revised and "ballyhooed" as essential to national defense.

A much more drastic as well as extremely dangerous proposal is the revised Schwert Bill (H.R. 1074), planned by the American Association for Health, Physical Education and Recreation. This bill would provide $200,000,000 a year after 1945 for physical education and summer camps.

More Direct in Its Approach

This bill is much more direct in its statement of control. It would recognize community control over instructional programs only "insofar as consistent with the purposes for which funds are made available under this act." It also places within the jurisdiction of the physical educator responsibility and authority "to develop . . . desirable social behavior and democratic ideals," an exceedingly wide assignment responsibility for a single curricular division! It would provide under school control a universal camping program for which our educational system is not yet ready and the total educational possibilities of which have not been fully explored.

The enactment of this bill would give to the U. S. Office of Education, under the plea of "toughening the people for war," even stronger control over one sixth of the total curriculum than it has gradually acquired over vocational education. With the enactment of this bill, the federal government would control every curricular activity except the languages, fine arts, exact sciences and social studies! Through means of relatively small subventions without a change in statutes, the Office

of Education could and would dominate the public high school system! The operation of vocational education has proved the extreme danger of specific subventions, particularly in the instructional field.

The second group of federal activities is the gradual change of the depression-emergency activities into permanent programs including the Work Projects Administration, the National Youth Administration and the Civilian Conservation Corps.

State Is Logical Authority

The Work Projects Administration employs directly approximately 50,000 teachers who serve an enrollment of 1,250,000 students in adult education, lectures and forums, nursery schools and special instruction in selected fields. There is definite need for most of these educational ventures but they might be much more logically served through direct subventions to the state and community education authority. It is already obvious that W.P.A. educational administrators and personnel plan a permanent organization and ultimate federal control of the vital field of adult education.

The National Youth Administration's original purpose received enthusiastic support from educator and layman alike. It was the first real attempt to equalize educational opportunity, which was seriously diminished by individual economic inability to attend school. The development and administration of work grants to pupils in secondary schools and advanced institutions permitted many thousands of capable young men and women to continue their education.

Work grants, it is realized, are a permanent need. They should be expanded to meet not only the needs of those individuals who are in school but also those of capable youth who have dropped out of school because of inadequate funds. The underlying principle is sound and this part of the program has been well administered.

The National Youth Administration, like all other agencies of federal government, appears to be more interested in expanding its orbit of power than in doing one job well. Even before the current national defense emergency arose, plans had been carefully laid for the development of

One of the six panels in Edgar Britton's mural, "Classroom Studies and Their Application," done for the Bloom Township High School, Chicago Heights, Ill., by W.P.A. Architectural draftsmanship and its later application are interpreted in this panel. In the upper part of the composition the artist shows the future professional use of the studies.

secondary "work schools," independent of community and state authority and operating under direct orders from Washington. The rather specious reason was that the community secondary schools had failed and it was therefore essential that a more competent authority, *i.e.* the National Youth Administration, provide a substitute.

These plans have been publicized in The Nation's Schools since January 1940. A special appropriation was obtained for the purpose of establishing these "work schools" in the emergency legislation of 1940 and requests for additional appropriations for these independent secondary schools, narrow in concept and dangerous to our one way system of public education, are included in the 1941 federal budget.

The Civilian Conservation Corps camps have been among the most popular of the depression educational ventures. There is no vital reason why they should not be reorganized by states, combined with N.Y.A. activities, and placed under the control of the state education authority and operated in cooperation with the state conservation departments.

The people of the United States have evolved in the course of one hundred and fifty years a program of universal education which, while a legal function of the state, has been community centered and community administered. Thus, the people, operating in the tradition that the public school is an extension of the home, have maintained direct control of this most powerful agency of social propaganda. If this control is maintained, many of the current dangers inherent in the general tendencies toward centralization may be counteracted.

Danger of Federal Bureaucracy

If the people and the teaching profession, for the sake of a few dollars of support, permit the control of program gradually to drift from the community and state to the federal government, there is grave danger that the powerful federal bureaucracy may be able to speed its plans for a completely centralized government, including public education.

If the current plans of federal agencies for a parallel system of federal education are permitted to grow, the classlessness of a single and unified system of public education will be gradually destroyed. The present community centered system of public education is one of the greatest safeguards against autocracy that the genius of the American people has developed to maintain and improve democracy.

There is still time for the people and the teaching profession to stop these bureaucratic grasps for power. If the congressmen and senators are apprised of the dangers to American public education in these attempts, they will act; they have the power to stop the attacks.

President Roosevelt does not favor federal control of American education. Congress does not favor federal control of public education. However, if there is no strong expression of public opinion on the subject, Congress will probably accept the recommendations of its executive agencies and may respond to the pressure of strongly organized minority professional groups. The current emergency in national defense should not be used as a cloak to remove from our communities control over the education of the children.

Are Our Young Men "Soft"?

WARREN E. FORSYTHE, M.D.

Director, Student Health Service, University of Michigan

THE frequent popular reference to the "softness" of our youths merits examination. The usual inference is that our young men are less capable than their fathers were for national defense. This indictment appears to be vague in meaning, of uncertain origin, based upon opinions and subject to challenge.

The extent to which our young men are physically soft from lack of exercise and the extent to which it can be overcome in a relatively short period of training are basic questions that need answering. Answers to such questions based upon scientific and controlled data are needed. Personal opinions should be viewed critically.

Conditioned Against War?

Aside from physical fitness as determined by training there is also an aspect of "toughness" that may be termed mental. The importance of this mental aspect and its comparative evaluation are much more difficult problems. The assumption that habits, attitudes and ideals are different than they were in a previous generation would probably be accepted widely. Adult reactions in the United States during the last twenty years relative to war may have conditioned our youths against preparation for even possible war. Certainly, the social situations to which young adults must react now are not the same, if not very much more difficult, as those experienced by their fathers.

The extent to which acquired mainsprings of youthful behavior are subject to modification is just another of the many human problems upon which valid answers are needed. As with physical softness, it would appear that the burden of proof is upon the person who expresses the opinion that our youths of today are less dependable than were their ancestors in standing up for social ideals concerning which there is agreement.

The other general condition of our youths concerns those aspects not ordinarily considered as matters of training. This means essentially physical bodily effective capacities commonly thought of as medical questions or points to be judged by physicians. Relative to this, there is little if any evidence of deterioration, but upon some ground one may judge that the health of our present young men is superior to that of their fathers at the same age.

Before discussing evidence of change in physical status, one may refer to what would be expected from the last twenty years as affecting the health of your youths. Detectable changes would certainly not be expected from the effect of twenty years in any biological consideration of evolution. Significant changes in health might be expected, however, from scientific programs of disease prevention and health promotion. These have been carried on, however imperfectly, essentially only since the birth of our present young adults.

In any consideration of effective service one must deal with the chance of disqualification from sickness and its results. From this point of view, and judged by records of contagious disease in particular, the service of our young adults should be superior in some ways and inferior in none.

Contagion Much Reduced

The significant decline in many contagious diseases and the increase of practically none during the last twenty-five years argue well for less anticipated sickness from these in our young people. What is more important is that there certainly should be fewer permanent physical defects which commonly result from contagions.

Some data on noncommunicable disease and physical defectiveness are available from various sources. Comparisons of draftee examination data in the two periods are of course the most extensive but they should not be made without critical examinations of standards of selection.

Many colleges have records of examinations of students. The percentage of college men sufficiently defective to cause military rejection dropped in twenty years from 20 to 10 in several thousand records from Purdue, Indiana and Minnesota universities. From these sources and from the University of Michigan, the following generalizations are justified in comparing young men now with those of twenty years ago.

General Health Picture

1. Average heights and weights have definitely increased. This may be interpreted as a valid index of generally improved health.
2. Health histories show reduced frequencies of the contagious diseases; smallpox vaccination rates are higher.
3. Increased use of glasses and removal of tonsils are examples of better attention to physical defectiveness.
4. The significant decrease in goiter in our younger generation should be to their advantage.
5. The leading impairment causes for army rejection in 1917-18 were, in order: orthopedic, eye, cardiovascular-renal, underweight, hernia, tuberculosis, dental, nervous and mental. There is good reason to expect that tuberculosis and underweight will be less frequent and there is no good reason to think that the others will be increased significantly if at all.
6. The greatly increased accident rate from automobiles may be expected to produce more cripples, although such an increase is not generally observable.
7. The relative probable increase in diabetes affects small numbers, while heart disease and cancer increases apply mostly to older age groups.
8. The widespread increase of "ringworm" infection of the skin would rarely disqualify for more than short periods at the most.
9. The problem of the upper respiratory infections, such as colds, has improved to the extent that the disabling pneumonia is now under much better treatment control.

After Defense Jobs, What?

PEDRO T. ORATA

Consultant, Occupational Information and Guidance Service, Office of Education

WITH feverish enthusiasm for training for defense and with the attention of the nation keyed up to training in specific skills, we are likely to forget that the war is not going to last through the remainder of the lifetime of even a middle-aged man now living. It is well to consider the effect of learning the new skills incidental to defense upon the postwar adjustment of those who must learn them. Even in England there is activity on foot now to prepare for the years immediately following the war.

Transfer of Training

The problem is how to arrange the new learning situations so that the resulting learnings will facilitate rather than inhibit future adjustments; in other words, how to provide for transfer from defense situations to postwar peacetime situations.

Fortunately, the evidence that has accumulated in the last six years confirms overwhelmingly the findings that I summarized in 1927 and again in 1935: first, transfer is a fact, as revealed by more than two thirds of the studies that have been made; second, transfer is not an automatic process that can be taken for granted, but it is to be worked for; third, the amount of transfer is conditioned by many factors, among which are: (1) the way learning takes place—the more thinking and reconstruction of experience that are brought to play, the more the amount and permanence of transfer there will be and the more certain transfer is to take place; (2) the degree of thoroughness of the original learning, and (3) the intelligence and age of the individual.

The most outstanding work on transfer during the period of this survey was that of George Katona of the staff of the New School for Social Research, who undertook an exhaustive study of the problem under a grant from the Carnegie Corporation of New York. This work is comparable in the care and control of situations to that exercised by Lashley in his epoch-making study entitled "Brain Mechanisms and Intelligence," which dampened the enthusiasm of those who were inclined toward the mechanistic interpretation of human learning.

Doctor Katona experimented with human subjects in lifelike situations and attempted, with great success, to distinguish between meaningful and senseless learning. The experiments were repeated many times to safeguard errors and the results proved to be consistent in showing that while senseless learning does not transfer meaningful learning does. Says he, in part:

"With meaningful learning most highly developed, we find that there is plasticity or flexibility of learning which permits reasonable applications on a wide scale. These applications are due not to the transfer of specific data from A to B but to the fact that meaningful learning results in the acquisition of integrated knowledge, which is usable under different circumstances."[1]

Cultural *v.* Vocational Training

The implications of these facts for the curriculum, guidance and personnel work should not be difficult to draw. President Hutchins has raised the question regarding the wisdom of putting an undue emphasis upon vocational training on the ground that the United States will be defended not by guns, planes and warships but by morale of the American people. He favors the development of the "higher mental processes" as the safest course to take in this emergency.

On the other side, the majority side, the dice are loaded in favor of all aid to Britain short of war, meaning vast and fast production of implements of war and their use both for the defense of the Western Hemisphere and by the allied armies.

The issue of cultural *versus* vocational education is more evident now than ever before with the odds favoring, for the first time in educational history, specific training for skills needed for immediate use in defense.

On the side of guidance the situation is the same. The guidance people are keyed up to defense, too, and the present situation does not alter their general presupposition that guidance must be specific if it is to be effective. With this added worry on their part, what should be the nature of the guidance process now that will provide the most effective readjustment later? On this question people in the guidance field are not articulate. Like those in other phases of education, they want specific guidance that will result in the quick assignment of applicants to jobs but they also want guidance to be general enough to enable the job holders to change to radically different jobs later without much loss of efficiency or time.

Making Classroom a Democracy

On the side of personnel work there is a growing trend toward the humanizing of school records and reports. Not mere child counting but real child accounting seems to be the order of the day. If democracy as a way of life is to be promoted and preserved, the first place to begin, after the home, is the classroom in which the human elements of cooperativeness, assumption of personal responsibility, sensitivity to personal and social problems, ability to perform the necessary civic functions and the like take the place of school marks in the school register and on the report card.

To work for these directly and to work for their acquisition in a meaningful and understanding manner, not in senseless repetition, are to provide for their retention as functional patterns of behavior and for their transfer to the daily affairs of living in the home, on the bus, in the church, at the theater, at the grocery store or wherever and whenever people are together.

[1] Katona, George: Organizing and Memorizing: Studies in the Psychology of Learning and Teaching. New York: Columbia University Press, 1940, p. 136.

On Behalf of Labor

PHILIP MURRAY
President, C.I.O.

Increase appropriations now! Improve facilities, teachers and educational opportunities now! So urges the head of the Congress of Industrial Organizations and member of Pittsburgh's school board

THERE is serious danger that the great expenditures on national defense will be used as an excuse to cut appropriations for schools. Indeed, in many states and localities these cuts have already occurred. Such decreases are a tragic mistake and they weaken the foundations of our real bulwark of defense. They are the result of narrow and misshapen conceptions of what the defense of democracy really means.

The President has defined our national defense program as encompassing the creation of citizens "of health and stamina, conscious of their democratic rights and responsibilities." He has indicated that one of the essentials of national defense is the intensification of our normal peacetime pursuits. It is clear that our nation will be best served and protected in this period by using our educational resources to the utmost that better citizens may thus be trained. The need for citizens more intelligent, more useful to the nation and more convinced of the righteousness of the democratic way is greater now than ever.

Now is the time to increase the appropriations for our schools. Now is the time to improve our facilities and our teachers. Now is the time to move forward in establishing a real equal opportunity for education, an opportunity that, unhappily, is still a dream.

On behalf of labor I contend that urgency for establishing federal aid to education is greater now than ever before. It seems to me that this nation, right now, should establish the principle of such aid as the only practical means of equalizing educational facilities for children throughout the country. It is ill-conceived economy to continue to deprive the children in many of our states of even the minimum facilities for education. What more effective proof could be offered of democracy strengthened than the bringing of decent schools and good teachers to the millions of American children as yet without that opportunity?

There is another reason for establishing now the principle of federal aid to education. Some day there must be an end to these great expenditures for war. I only hope it will be soon. When those arms expenditures fall off, our nation will be faced with the necessity of making other public expenditures in order to prevent economic collapse. If at that time the principle of federal aid to education has been established, I believe the nation will turn happily to the prospect of expending large sums upon our educational system. I can think of few areas of public expenditure that labor would welcome more heartily.

I have seen appalling figures which show that a large proportion of young people have to drop out of school, not because they want to, not because they have learned all they can, but because their parents cannot afford to keep them there. If we are to make full use of our great human resources, we must devise the means to provide these young people with livelihood while they are in school.

The first step to doing that is, of course, the provision of a decent income for all American families. In 1938, relatively a good year, the records of the Social Security Board showed that of some 30,000,000 workers covered by old age insurance 66 per cent received an annual income of less than $1000. That is not enough money on which to keep children in school. The first remedy, then, to an equal public education is the blotting out of such poverty.

In the meantime, we have seen established such institutions as the National Youth Administration which with all their imperfections point the way to providing for young people a means of economic support while they are at their education. Labor believes that such organizations should be expanded so that all young people who need and want education shall have an opportunity to get it.

Labor is not satisfied with the things being taught in American schools. We do not differ much from educators in this dissatisfaction. There is much that needs to be done and is not yet being done to adjust our elementary and secondary school education to the needs of American young people. They are not yet being given the habits of work and of thinking so needed in the world today. They are not yet being adjusted to the kind of jobs that they must take on. They are not yet being realistically trained to be the kind of citizens they ought to be.

Let me give a concrete example. Today there are more than 8,000,000 organized workers in the American labor movement. Most workers in the great industrial plants of the nation are organized under the C.I.O. Collective bargaining is a recognized and legalized function throughout the whole country. The conditions of work and many of the important conditions of living of future workers will be intimately affected by the labor movement. Yet I daresay there is hardly a boy or girl coming out of high school or even college who has an adequate knowledge of the American labor movement.

It is my belief that the representatives of labor have a great deal to contribute to the school system. I have urged upon the people in our movement that they take a more vigorous part in the promotion of public education in their communities. They know the needs and aspirations of the working people but they cannot make their contribution without the cooperation of the school authorities. I would urge upon you that you seek out the representatives of organized labor in your communities and ask their cooperation. You will find an idealism and an energy that, harnessed to the cause of education, will do much to help with that kind of school system we want.

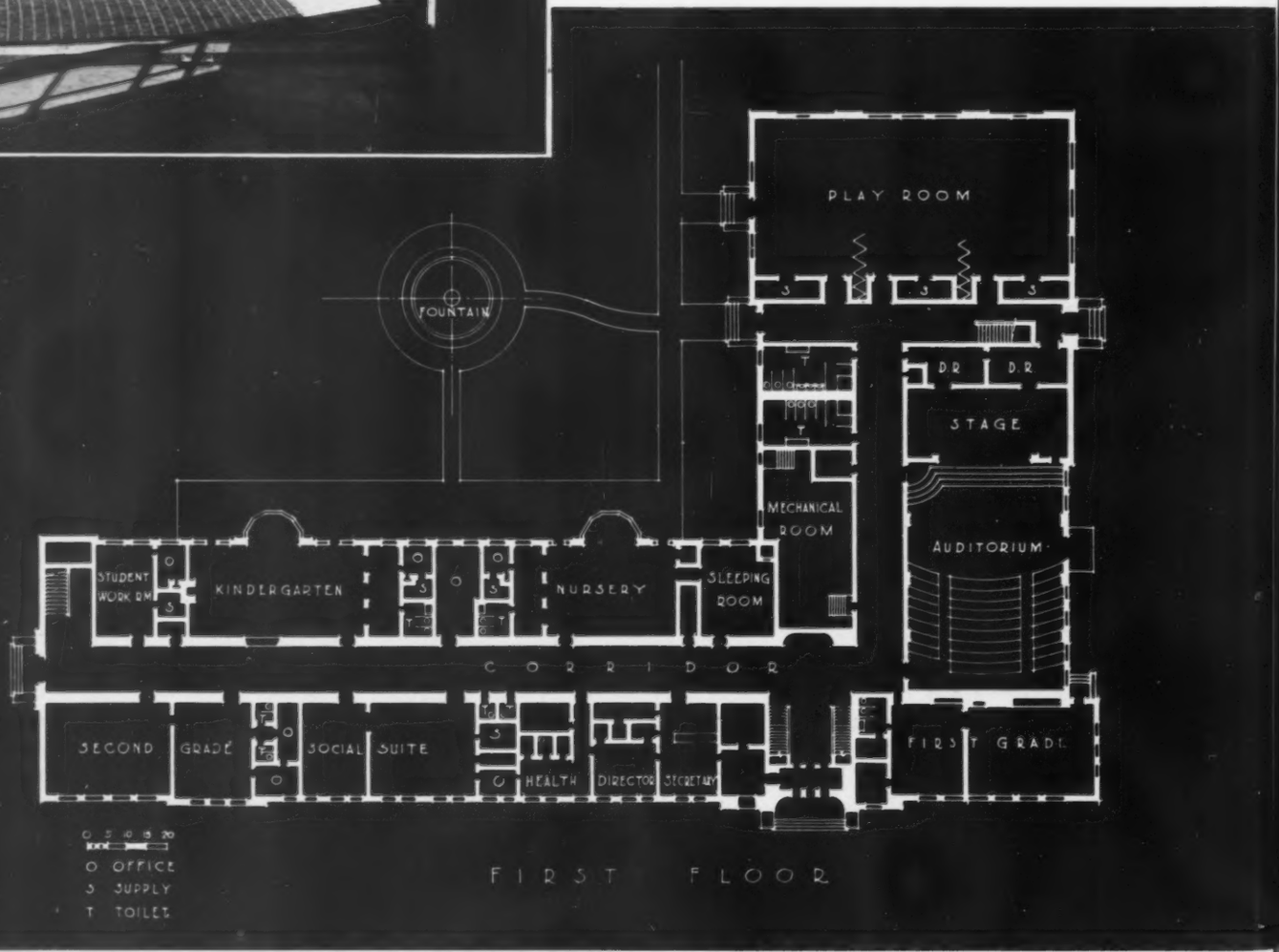
Classroom Suites Unify Activities

AMANDA HEBELER

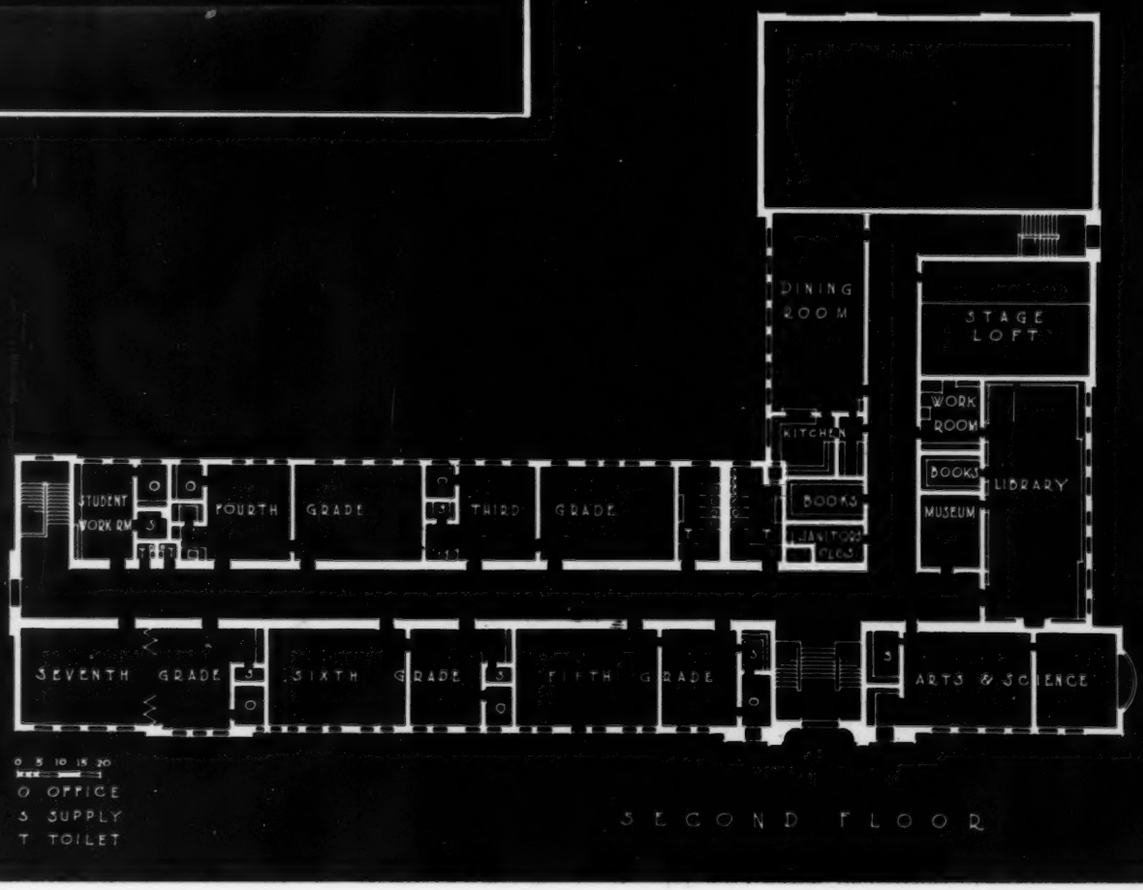
Director of Teacher Training
Central Washington College of Education, Ellensburg

THE College Elementary School recently erected on the campus of Central Washington College of Education at Ellensburg provides facilities for carrying out a teacher education program and for the many and varied activities included in the present day curriculum for nursery, kindergarten and the elementary grades.

The new building was located on the college campus in order to make it accessible to college students. Fortunately, there was available an area that provided ample playground space for the children. Plans culminated in a two story L-shaped building of masonry construction, the outside walls of brick with pilasters, moldings and cornices of Indiana limestone in modified Colonial style of architecture to harmonize with the other college buildings. On the first floor (*Continued on page* 30)



Above: Kindergarten fireplace tiles, portraying Mother Goose characters, were planned by children of the sixth grade. Left: Child figures cut in relief in the stone panel above the main entrance of the building portray children engaged in familiar play activities. It was designed by Pauline Johnson, art instructor.



Observation windows fitted with sliding one way screens provide the means for college students to watch children's activities in kindergarten, nursery and clinic. Screen and window have been pushed aside for the photograph. There is a workroom with wardrobe for student teachers on each floor.

are the administrative offices, health suite, psychologist's office, nursery school, kindergarten, first and second grade classrooms, auditorium, playroom, student teacher room and supervisor's office.

The six double door entrances from the street and playground provide access to the main corridors, playroom and auditorium on this floor. Five individual doorways lead directly to the playground from the nursery, kindergarten and first grade rooms. The stairways are lighted by large windows. On the second floor are the classroom suites for grades 3, 4, 5, 6 and 7, the arts and science suite, library, kitchen, dining room, student teacher room and supervisor's office.

Instead of the usual series of isolated rooms, this building is made up of suites of rooms designed for related services and activities. Each is a separate functioning unit but it remains a vital part of the whole.

The classroom suites include a main room, auxiliary room, teacher's office and supply room. In the primary units a lavatory and toilet room also is included. The offices, child study clinic and health rooms of the administrative suite connect. This is convenient for the nurse, psychologist and director in sharing materials, equipment and children's records, which are kept in the general office. The health suite includes, in addition to the examination room, a retiring room fitted with comfortable beds for children, a teacher's room, a supply room, shower and lavatory. The library with museum, conference room and librarian's workroom and the supervisors' offices with adjoining student teacher rooms are other examples of units of related rooms.

Many adjustments were made as plans progressed to provide convenient and suitable locations for the various suites. For example, the kindergarten and nursery rooms are placed in the wing of the building having a southern exposure so they will receive more sunshine and the children will have direct access to the playground. Because the valley in which this school is located is just east of the Cascade Mountains it has been a distinct advantage to have the play court sheltered from the northwest winds which prevail here. This is accomplished by the walls of the building which border the playground on the north and west sides.

The use of modern materials has added much to the comfort of living in this school. Visitors frequently comment on the lack of noise in the building though 270 children and hundreds of college students move freely and informally through the corridors and from room to room throughout the day. Acoustical material on ceilings and floors covered with linoleum give excellent sound absorption.

Washed and filtered air is furnished by a combination heating and ventilating system comprising direct radiation thermostatically controlled. All classrooms have much natural light, which is regulated by venetian blinds. Electric lights for each room are on two circuits and photo-electric cell units automatically regulate the artificial lighting so that adequate intensity is assured at all times.

Other features of construction and equipment related to safety and health have been given thoughtful attention. Rooms for the younger children were placed on the first floor. Difficulties of stair climbing for children in the intermediate grades are reduced to a minimum with carefully planned stairways. All radiators are shielded by panels of pressed fiber board. Special radiators beneath the floors of the kindergarten and nursery ensure the comfort of small children who play on the floors.

Sanitary drinking fountains are located in convenient niches in corridors, lavatories and playrooms. They are adapted in height for small and large children by tiled steps. Lavatories are equipped with large enameled trays fitted with a series of water mixers; these provide washing facilities under a continuous spray of clean water. In addition to the boys' and girls' rooms located on each floor, lavatories, toilets and drinking fountains are included in each suite of rooms used by the nursery, kindergarten, first and second grade children. All equipment is placed conveniently low and is suited in size for children's use. Children do not need to be urged to wash when it involves the delightful sensory experience of putting hands under a spray of warm running water and self-inspection before a full length mirror.

In the general building structure the architect, John W. Maloney of Yakima, Wash., has maintained a simple and conservative style of architecture and at the same time has

incorporated the advantages of modern materials. These materials were carefully selected to be harmonious with the general design of the building and to give individuality to each room.

No two classroom suites are exactly alike. Paints for the different rooms were tried out until the colors were harmonious with the Philippine mahogany woodwork, floors and other room details and were suitable to the exposure. The linoleum on the floors varies in color also. In most of the classrooms and corridors a light cream jaspé is used; in the offices and art room, antique mahogany; in the library, science room and health suite, sunshine yellow; in the social room, red, and in the auditorium, regal blue.

This variety gives personality and a distinctive quality to each room. For example, the quiet beauty of the the auditorium is created by the soft gray walls, regal blue linoleum floor and horizontal brass bandings on the wide steps leading to the stage. The stage floor of light maple and the draperies of burgundy red velours with blue velours cyclorama and borders all contribute to a pleasing color harmony.

The library is a sunny room with the varied colors of thousands of books on the Philippine mahogany shelves; tables and chairs are in light oak finish, and walls are painted a light gray green to tie in with the jaspé linoleum.

Other features of the building that give it a distinctive quality are the bay windows with stained glass medallion insets in the nursery and kindergarten; the fireplace in the kindergarten; a niche in the corridor directly opposite the main entrance, planned to provide a place for a piece of memorial sculpture; a color design of the Western Hemisphere in the terrazzo floor of the foyer; a large bay window with tiled ledge in the science room, and a pool with fountain in the play court.

Art in American Life

THOMAS MUNRO
Curator of Education
Cleveland Museum of Art

THE fortieth (1941) yearbook of the National Society for the Study of Education will be the first in its history to deal directly and systematically with the visual arts. The yearbook is intended to be a survey of present ideas and practices in teaching the visual arts in this country on all age levels. It is intended also as a critical appraisal of the present situation, with recommendations for improvement. In these recommendations, various opinions are represented.

The book is not a treatise on teaching methods in the narrow sense or a manual for classroom and studio procedure. It deals rather with the more general and fundamental aspects of educational methods: the main objectives, materials and types of activity involved. It is not restricted to formal classroom schooling but considers also the many outside influences, good or bad, which can be broadly grouped under the heading of "art" and which contribute to the shaping of personality.

The detailed outline was prepared on the basis of the plan worked out by the late Dean Haggerty of the University of Minnesota, who conceived and proposed the undertaking. Numerous chapters have been written by authors within and outside the committee.

The book consists of four main sections: (1) art in American life; (2) the nature of art and related types of experience; (3) art education: its aims, procedures and agencies, and (4) the preparation of teachers of art.

The first part of the book does not deal directly with education but with the visual arts themselves, as vital present activities in American society, as types of productive enterprise whereby people gain a living through providing goods and services. It considers them partly from the consumer's standpoint, as a set of goods and services from which he selects certain ones for purchase, enjoyment and use. Thus, the educational aspect is approached in a realistic way in terms of art as an actual force in contemporary American life.

The first section reveals in a forceful way the extent to which art is already a powerful factor in our social life and one to be taken seriously from the economic and social standpoint as well as from the esthetic. Art is not conceived narrowly as drawing, painting and sculpture alone but as including architecture and city planning, industrial and commercial design, clothing, house furnishing, printing and theater arts.

Due attention is given to the many ways in which these visual arts enter the American educational system. There are chapters on the technical training of professional artists and on the arts as part of a general liberal education. There are chapters on the training of teachers and supervisors of art. There are chapters on the arts as taught on various levels, from elementary school through college, graduate and professional schools. There are chapters on the chief contemporary movements in art and in the discussion of art values. There are chapters on various contemporary theories of how art can best be taught, with recommendations for a judicious solution of these issues. There are chapters on art instruction from a school administrator's standpoint, with a consideration of costs, equipment and organization.

The yearbook has been in preparation during the last three years by a committee under the chairmanship of Thomas Munro, curator of education at the Cleveland Museum of Art and chairman of the division of art at Western Reserve University.

Other members of the committee are Alon Bement of New York; George S. Dutch of Peabody College; Raymond P. Ensign of New York; Royal B. Farnum of the Rhode Island School of Design; Ray Faulkner of Teachers College, Columbia University; Robert S. Hilpert of the University of California at Los Angeles; Ernest Horn of the State University of Iowa; C. Valentine Kirby, director of art education in Pennsylvania; Felix Payant, editor of *Design*; Leon L. Winslow, director of art education in Baltimore, and Edwin Ziegfeld of Teachers College, with Milton S. Fox of Cleveland and William L. Longyear of Pratt Institute as associates.

Education for Family Life

A Review of the 1941 Yearbook

E. W. JACOBSEN
Dean, School of Education
University of Pittsburgh

THE first school was the home. The first teacher was the mother. In time, as the state and the church assumed educational responsibilities, the gap between the school and the home broadened. But in America this separation has been bridged in many ways.

Prior to the turn of the century schools were small and usually located in the center of the community. The teacher often boarded in the homes of the pupils. In recent years the parent-teacher movement made parents and teachers students of a common curriculum and workers in a common cause. Today parents and citizens generally participate in school activities and help to determine the scope of educational programs. Through all the years education has exerted a constructive influence upon family life through the opportunities it has afforded the children.

Obligation to the Home

Awareness of the obligation of education to the homes of America is the basis of this yearbook. In 1938 the executive committee selected the topic, "Education for Family Life." President John Sexton appointed the original members of the commission. An additional appointment was made by President Carroll R. Reed. The members of the commission are: Mrs. Carol Ryrie Brink, author, St. Paul; Vice President Lawrence K. Frank, Josiah Macy Jr. Foundation, New York; Ernest R. Groves, Institute for Research in Social Science, University of North Carolina; Mrs. Kate W. Kinyon, director of home economics, Denver public schools; Gertrude Laws, director of education for women, Pasadena public schools; Supt. DeWitt S. Morgan, Indianapolis; Flora M. Thurston, Cornell University, and Supt. Worcester Warren, Bridgeport, Conn.

The following statements indicate the general point of view set forth in the yearbook:

1. The interests that center about family life deserve and need the same attention that education attempts to give to other major human values. The family in the modern world cannot be expected to flourish unless those directing instruction in the formative period of the child appreciate and emphasize the significance of the home.

2. Family life has been changed and is being changed by present day conditions but the home is not losing importance as one of the major institutions of human society.

3. The weakened influence of homes or even the related social change is not a necessary consequence of the ongoing of social experience and does not indicate that efforts for the conservation of the family must necessarily reinstate earlier domestic characteristics.

4. The values of family life are subject to change because they arise out of the experiences of individuals whose social background is in process of change.

5. These values are determined by the experiences of men, women and children living together in the intimacy of day-by-day contacts under conditions of varying economic and social situations. The common elements do not efface the peculiarities of individual households and the personalities that compose them.

Influence Must Be Wholesome

6. The values of family life are not automatically provided by the mere continuity or strength of family relationships. Because of its intimacy, its privacy and its emotional meaning, family life has possible hazards. Society must seek to increase the wholesome influences of family life and to lessen the potential risks.

7. The important position of the school and the power it possesses to influence children and youths during their growth period bring a responsibility for deliberate educational effort to conserve the home.

8. A program of education for family life can never be sufficient that contents itself with merely adding specific formal instruction to the present curriculum. There is a need for utilizing the findings of science as they are related to child welfare and parental functioning. The school may become an effective support of the family in part by distributing the information and insight that science, especially biology and medicine, offers both parent and teacher as a means of understanding and safeguarding childhood, parenthood and marital relationships.

9. The program of the school cannot safely be self-contained; it cannot be planned solely by educators and imposed upon child or parent; but it must in part draw from the experiences as well as enlist the support of family life. In order to accomplish this, there must be a willingness to value the contribution of the parent to the intellectual development of the child and not merely an eagerness to win the parents' support that the school may impose its self-chosen program upon the pupil.

What Contents Includes

The table of contents of the yearbook gives some idea of the areas considered: "Let Us Face the Issue"; "Homes Build America"; "Forces Destructive to Home Life"; "Practical Difficulties: A Parent's View"; "Educational Principles and Processes"; "Areas of Educational Effectiveness"; "Schools Can Help Homes"; "Specific School Activities"; "Leaders and Leadership"; "Conclusions and Recommendations."

The yearbook recognizes the many excellent contributions that schools are now making to home life. Through the social studies, health instruction, home economics and dozens of other activities schools are building wholesome understandings and attitudes. There is no suggestion in this volume that these effective efforts should be discontinued or replaced. Nor does the yearbook recommend the development of many superficial "courses on home life."

The Convention News

March 1941

America Must Re-Educate Europe When War Ends, German-Born Briton Says

A suggestion that the United States send several hundred selected educators to Europe following "the defeat of Hitlerism," to help in the building of a United States of Europe based on modern human education was presented by Reinhold Schairer, an Anti-Hitler German, now a British citizen, to the Progressive Education Association, meeting in Philadelphia.

"We all look forward to the defeat of Hitlerism," he added, "and we who have been with the English know that Hitler cannot beat them." Doctor Schairer, who left Germany in 1933, is head of the department of international relations and studies of the University of London.

He attributed the greatness of the English spirit to the new education which began to come into practice about 1830, an education he described as comprehending the virtues of kindness, fairness, cooperation and humility. The German foreign minister, von Ribbentrop, Doctor Schairer related, reported the spirit of English education to Hitler, saying that all English schools were progressive in this way and were, therefore, doomed, and Hitler believed him.

"God bless him for his error," said the speaker.

Pennsylvania Dean of Women Explains Attitude of A.Y.C.

Opposition of the American Youth Congress to war, the lease-lend bill and selective service may not be due to a lack of patriotism, Marguerite W. Kehr, dean of women, State Teachers' College, Bloomsburg, Pa., told the National Association of Deans of Women.

"Perhaps we have done too good a job of teaching the wrongness and futility of war," she said.

Miss Kehr declared that despite its many vicissitudes, the A.Y.C. is still the "most inclusive organization of American young people." For that reason it is important to educators, she said.

The A.Y.C. has been made up chiefly of "have nots" and their intense desire for jobs, opportunities for education and recreation and the righting of social wrongs has found expression in "lurid words and actions," she explained.

Administrators Stress Need for Fortifying Democratic Practices Through the Schools

By Arthur B. Moehlman

More than 15,000 educators and their wives were in attendance at the seventy-first annual meeting of the American Association of School Administrators, 13 other departments of the National Education Association and 68 independent associations, national committees, professional fraternities and special groups.

Prior to the large gathering at Atlantic City the Progressive Education Association met at Philadelphia and the International Council for Exceptional Children held its meetings in New York City.

W. H. PILLSBURY

In the midst of preparations for war or for peace, depending upon the individual point of view, the convention theme of the administrators had been aptly chosen: "To Provide for the Common Defense; to Promote the General Welfare; to Secure the Blessings of Liberty."

Throughout all the general sessions, but more particularly in the afternoon discussion sections, this theme received twofold interpretation. There was general acquiescence to the need for external defense against possible totalitarian aggression but heavy emphasis was also

(*Continued on page* 40)

A.A.S.A. Officers Named

Supplementing the mail ballot on the presidency, through which William Howard Pillsbury, superintendent of schools at Schenectady, N. Y., was named president, the A.A.S.A. convention on Wednesday afternoon named the following officers:

Second vice president: Worth McClure, superintendent of schools, Seattle, Wash.

Member of executive committee: Stanley H. Rolfe, superintendent of schools, Newark, N. J.

Doctor McClure will serve a one year term. Doctor Rolfe's election to the executive committee is for a four year term.

Right to Refuse to Listen Is Advocated by Aurelia Reinhardt

Another human right—the right to be silent or to refuse to listen—may have to be written into the constitution, along with the rights of free speech and free press, thinks Aurelia Henry Reinhardt, president of Mills College.

Cable, telephone and radio threaten the individual's right of privacy and his capacity and opportunity to think, Doctor Reinhardt declares.

"Our villages and towns have lost significance, as making rayon, nylon and neon is considered more important than breeding fine citizens," said the featured woman speaker at the A.A.S.A. convention.

"Large sections of youth, convinced of the outmoded nature of the home, of its unavoidable unhappiness or its threatened failure, no longer respect or desire to preserve it. Their cynicism includes the democracy of which the home is a part.

"Upon the American family still rests the fundamental democratic task of making daily life an experience of significance. Children must there be started on their way to be integrated, harmonious personalities."

Boom to Reach Apex Next Year, Guidance Chief Tells N.V.G.A.

The peak demand for workers will be reached in about a year, according to Harry A. Jaeger, chief of the occupational information and guidance service of the U. S. Office of Education, who addressed the National Vocational Guidance Association.

Ambrose Caliver, specialist in training Negroes at the Office of Education, said the Negroes constitute one of the country's greatest assets in the defense program. He said 13,000,000 Negroes have been left on the fringe of the economic picture.

"Employers won't hire them because they are not trained and training schools won't accept them because employers won't hire them," he said. "It is up to guidance workers to break this circle."

We Can Be Patriotic Every Day, War or No War, Says Dean Fred C. Smith

"Germany has put her faith in military force and almost totally neglected those elements so necessary to the continuous wholesome development of society.

"France tried to provide protection for her rather uncertain culture and England expanded and enriched her way of life with insufficient thought of its protection.

"America must learn from the experiences of those nations, define in no uncertain terms her democratic faith and then act like she meant it."

Dean Fred C. Smith of the University of Tennessee helped A.A.S.A. convention-goers clarify their concepts of patriotism in the foregoing sentences.

Americans have an opportunity to be patriotic every day of the year whether or not they are at war, Dean Smith declared. Paying taxes cheerfully, voting at elections, participating in community enterprises to improve our way of life can be just as patriotic as carrying a gun in battle.

The American people up to now have been overwhelmingly engrossed in developing a social and economic status in a somewhat hostile environment and have had a disposition to allow a few leaders to evolve their political structure. The present universal crisis—economic, social, religious, political and educational—has brought into relief the positive need for a more universal understanding of and participation in our democracy in all its ramifications if it is to continue to function to our satisfaction.

Dean Smith's own summing up of his patriotic beliefs is as follows:

1. We are the masters of our fate.

2. We may as a democratic people have just about what we want if we are willing to pay the price for its attainment. But before we make any contract to buy, let us have a description of the proposed purchase. This can only be done by a careful study of the past, interpreted in light of the present and projected into the future.

3. History interpreted in light of the present world conflict has proved that: (a) a social order based on force and aggression has never been enduring; (b) a society based on culture alone without adequate means of protection from both within and without is not secure; (c) a culture regardless of its refinement must be dynamic—a stagnating culture impregnated with selfishness and greed is doomed, and (d) American democratic faith must incorporate a dynamic culture—educational, spiritual, economic—evolved through our own thinking in light of universal experiences and protected by adequate safeguards.

"It is your job, my job, to do our part to bring this about. We will succeed to the extent every person in our democracy contributes according to his ability. We fail to the degree we leave the task for someone else to do. Are we ready for the challenge?" he asked.

School Must Be Active Agency in Cooperative Community Life

American democracy is cooperative community living. Each unit in each community is dependent upon other units and other communities. It is, therefore, necessary to plan cooperatively and to work together.

It is also necessary to fit individual programs into the larger American picture. All community agencies should, therefore, appreciate the American ideals under which they are allowed to operate instead of complaining about petty difficulties and limitations. It would be helpful if each group would compare its status in America with the problem that would be faced in any other country throughout the world.

Thus advised Supt. Will C. Crawford of San Diego, Calif., in an address before a discussion group on Monday afternoon.

Schools have a responsibility to participate actively with these groups, Superintendent Crawford believes.

Must Retrain Older Teachers, Strengthen School Leadership

Those teachers who were trained 20 years ago need retraining now. To accomplish this J. Paul Leonard of Stanford University states that we must employ many times the present number of supervisors.

We must also try to bring school leadership into harmony with modern social trends. Our leadership is not convincing the public that we are able to deal intelligently with youth's problems.

Educational leadership is shifting to the politician and the layman, Doctor Leonard warns.

Local Employment Surveys Urged

Establish research groups in each of the 1600 local labor market areas in the United States, urges J. Paul Leonard of Stanford University. Have these workers dig out facts and conditions on industry and employment and serve as liaison officers between industry, government, business, the schools and youth.

Benjamin Warns Against Neglect of Education for Defense Preparations

The first step in the total defense of any nation is to discard academic superstition and to educate the people in the fundamental purposes of the nation, to make them want to carry out those purposes and to show them that the job can be done, Dean Harold Benjamin of the college of education, University of Maryland, said in speaking at the opening meeting of the eighth annual convention of the Council of Guidance and Personnel Associations.

Warning against neglect of education while efforts are bent on preparation for war, he said: "The primary defense of our people is here.

"There have been few periods in history," Dean Benjamin said, "when educators were more critical of their detailed procedures and machinery and less critical of their dominant purposes and of themselves. The charter for the school and college must be a charter of purposes and personnel. The first question is what men want to do with education and the second is just, what men."

Racial Tolerance Is Index of Strength of Democracy

The most important test of the strength of our democracy is the extent of racial tolerance in America, thinks Ambrose Caliver, senior specialist in the education of Negroes, U. S. Office of Education.

Mr. Caliver suggested four approaches to the development of racial tolerance. They are these:

1. Recognition of the dangers of racial intolerance and determination to do something about it.

2. Encouragement of different racial groups to study about one another in schools, colleges and adult organizations.

3. Encouragement of individuals of different racial groups by first-hand experience and contact.

4. Development in individuals of different racial groups of the simple art of good manners, in private and public.

Claims Personnel Aspect Neglected

If personnel workers are not to have their functions taken over and administered by government agencies they must conquer lassitude and apathy and keep a watchful eye on community agencies related to personnel. This warning was voiced by Howard Y. McClusky, associate director of the American Youth Commission, who spoke before the Council of Guidance and Personnel Associations. He said that the personnel aspect of the defense program had not received much attention.

Industry Far Short of Apprentices Necessary for Defense Production

Industry now has 100,000 apprentices when it needs, to meet normal requirements, 1,500,000.

Although the number of apprentices is increasing at the rate of 3 per cent a month, this is not sufficient to meet the mounting mechanical demands of a machine age, William F. Patterson of the Federal Committee on Apprenticeship, U. S. Department of Labor, told the A.A.S.A. Department of Vocational Education.

When defense production reaches its peak it will employ an additional 4,000,000 men, Mr. Patterson estimates. One third of these will have to be men of more than ordinary skill.

Training within industry is going on rapidly. It consists of three parts: apprenticeship, upgrading and supervisory personnel training.

Contrary to popular belief, apprenticeship does contribute materially to current production, Mr. Patterson states. At the moment the acclimating period is reduced to the minimum.

Praise Does Not Help to Produce Special Ability

Praise of arithmetic work, used as an incentive by the teacher, fails to produce special ability in arithmetic, finds Schlesser of Colgate and Tilton of Yale.

Six teachers each teaching six experimental and six control groups cooperated in trying to develop a special ability in the experimental pupils by giving and withholding praise. Two forms of a standard battery of tests given at the beginning of the fourth grade and at the beginning of the sixth grade to 179 of the same pupils failed to show any significant change in special ability in arithmetic of the experimental group over the control group.

Give Children Practice in Democratic Life: Miller

List the complicated problems on which the voters of today must form judgment, suggests Supt. Chester F. Miller of Saginaw, Mich.

Having made the list, you will then agree that the most optimistic hope for democracy is to give children information, an appreciation of the value of our ideals of liberty and equality, and actual practice in democratic procedures in the schoolroom.

Only then can they be expected to perform well the duties of adult citizenship consistent with their democratic heritage.

School Building Advisory Council Would Approach Emergency Needs Conservatively

The twelfth annual conference of the National Advisory Council on School Building Problems was devoted to a discussion technic in the planning of rooms in community high schools and the problems of school housing in the present emergency.

President Francis R. Scherer was chairman of the panel discussion on "Planning Rooms for Community High Schools," assisted by a panel of eight specialists speaking on the following: general planning problems, Arthur B. Moehlman, University of Michigan; exact sciences, Harry A. Carpenter, Rochester, N. Y.; Ray L. Hamon, Peabody College for Teachers; fine arts, Chester F. Miller, Saginaw, Mich.; libraries, George A. Schultz, Detroit; vocational education, Hubert C. Eicher, Pennsylvania Department of Education; health and physical education, C. E. Forsythe, Michigan State Department of Education, and music, Glenn Gildersleeve, Delaware State Department of Education. The general opinion was that community school needs may be satisfied without incurring large extra expense.

John W. Lewis, Baltimore public schools, presided at the afternoon panel on emergency school building in national defense communities and in cities in which industrial production has been greatly accelerated. He was assisted by Henry F. Alves, Office of Education; William F. Credle, North Carolina Department of Education; William G. Eckles, Mississippi Department of Education; Ronald W. Kent, Newark, N. J.; Raymond V. Long, Virginia Department of Education, and Jon E. Nichols, Connecticut Department of Education.

The afternoon panel discussion warned against the erection of expensive and permanent buildings in specialized national defense communities that may be "ghost towns" within several years. Recommendations were made that housing problems in these areas be solved by studying the possibilities of transporting children to near-by communities already well supplied with schools or the use of very temporary structures.

It was also pointed out that many already existing communities will use the occasion to obtain large permanent buildings on the plea of defense needs. The entire discussion stressed the need for avoiding the mistakes of the World War and preventing the waste of money.

At the business session following the discussions, William F. Credle of North Carolina was chosen president to succeed Mr. Scherer, who automatically becomes first vice president. Alice Barrows, U. S. Office of Education, was reelected secretary, and John W. Lewis of Baltimore was made treasurer.

Raymond Long of the legislative committee presented the proposed federal bill sponsored by the council that provides for a comprehensive survey of school plant needs before major appropriations are made for capital improvement by the federal government.

Council Endorses Senate Bill Seeking Study of Plant Needs

The National Advisory Council on School Building Problems, at its twelfth annual conference, held February 22, passed the following resolutions:

1. To endorse Senate Bill 906 which provides federal funds for long-range studies of school plant needs.

2. To recommend the establishment of school building divisions or services in all state departments of education with adequate budgets for this work; also that copies of this resolution be sent to each state superintendent.

3. To offer its services to the U. S. commissioner of education in working out policies with regard to permanent and temporary school building planning and construction during the present emergency and to urge that he appoint an advisory committee of specialists in school building planning and construction to advise with him in developing such policies and procedures.

4. To recommend that all school building construction undertaken during the present emergency should be based upon, and articulated with, a long-range school building program for the state or area.

5. To request the commissioner of education to publish in the form of an Office of Education bulletin the material on room layouts for high school buildings submitted at this conference, together with any additional material that might be collected by the Office of Education on this subject.

Has Place to Post Pictures

That multi-use blackboard fixture would not have attracted the attention it did in the exhibition hall had it not been for the comely young woman attired in a smock who was working on it with crayons. This ingenious classroom device, while not new, continues to win friends and influence people, serving as a display board and art easel. Nor is that all; it is just as successful when used as a display shelf and work board and as a corridor exhibition board.

Rotten Spot in American Apple Is Tendency to Ask: "What Will It Get Me?"

"The danger to our American way of life arising from indifference, ignorance, indolence and secret admiration for the ruthlessness of a dictator is greater today than the danger from any actual military conquest," Dean M. R. Trabue of the school of education, Pennsylvania State College, told the A.A.S.A.

"Battleships, troop transports, airplanes and submarines are substantial objects, which can be seen with the eyes and recognized at once as dangerous.

"Lack of viligance, careless thinking, witch-hunting, selfishness and mob action based upon dramatic emotional appeals are probably more dangerous, for the reason that they are not recognized as readily as are attacks on our democratic national life."

Dean Trabue remarked that all the research that has been done in chemistry, physics, metallurgy and the other sciences is now being focused on the problems of military and naval defense. It is the duty of those who are familiar with research in the behavior of human beings to focus the findings of this research on the problems of intellectual, emotional and spiritual defense.

"As I view the problems that challenge us today, the central core of all of them is how to condition the citizens of America so that they will act in terms of our common good rather than merely in ways that promise to bring special advantages to their families, friends and organizations," Dean Trabue asserted.

"The rotten spot in the American apple is our tendency to ask with regard to every proposal, 'What will it get *me?*' Somehow, we must change that to the question, 'Will this act help to make us a better nation?' "

Public sentiment must be developed in such a way that all attempts to take a selfish advantage of the weak or slow thinking will be punished by public disapproval, if not by more drastic community action, Dean Trabue declared. Teamwork must be substituted for selfish competition for individual recognition.

This conditioning process ought to begin in the home and be carried forward in the school, for an individual who has been encouraged in his youth to "beat" someone else will be hard to convert when he is grown.

Says Academic Freedom Allows Indoctrination for Democracy

To the three Rs add one D.

Dean B. F. Pittenger of the school of education, University of Texas, wants American children indoctrinated in the basic and abiding principles of American democracy. He regards indoctrination as an inalienable professional duty of American teachers.

So regarded, it will become as normal a function as is the teaching of reading and arithmetic. In no way does indoctrination for democracy invade the accepted principles of academic freedom, he believes.

SCHOOLMEN ARRIVE IN ATLANTIC CITY

Superintendents May Be Responsible for Diseases and Deaths: C. E. Turner

"Bowlegs" run in families not because of heredity but because daughters plan the same unhygienic diets as did their mothers.

How large a part nutrition plays in health was dramatically stated by C. E. Turner, professor of public health and biology, Massachusetts Institute of Technology.

While rickets, scurvy, pellagra and beri-beri are not readily noticed in school children, they are common, in a mild and unrecognized, or subclinical, form, Doctor Turner told his audience.

Diphtheria has disappeared in communities intelligent enough to use available means to control it.

Simple goiter will not appear in any community where school children learn to use iodized salt.

In such situations those responsible for education become responsible for diseases and deaths.

Every school superintendent, Doctor Turner states, has responsibility for the following:

1. Developing an organized program of education for disease prevention and health promotion.
2. Educating for a wise use of medical care.
3. Helping to organize the community for a city-wide program of health education.
4. Maintaining suitable machinery for disease control in schools.

Solid Basis of Personal Peace Through Religion Ensures Ideals

Democratic and Christian ideals are largely identical. In both religion and democracy it is incumbent upon the group to be interested in and working for the welfare of the individual.

The speaker is Dean Henry Lester Smith of Indiana University School of Education on the subject, "Developing an Appreciation and Loyalty for American Ideals Through Religious Life."

A most important effect of a religious life upon American ideals is in the realm of peace and happiness in both the individual and society. The American ideal is that man shall be free to find this spiritual peace in whatever type of religious belief or worship he wishes to hold and practice.

It is highly essential today that we find this solid basis of personal peace. There are so many frightening issues facing the American people today that they need a courageous, unfaltering spirit. Religious life gives that faith and courage which will carry us through all our wars for democracy.

Special Supervision Need Not Be on Way Out, States Sexson

Is special supervision on the way out?

Supt. John A. Sexson of Pasadena, Calif., says the answer depends primarily on the following factors:

1. The degree to which democratic principles permeate administration and supervision and the degree to which the supervisory program develops out of and centers around the teachers' own problems.

2. The assignment of the special supervisor to the rôle of consultant or adviser rather than to that of director, and a clarification of differences in relationships.

3. The ability of the special supervisor or consultant to see his field in its proper relationship to the total educational program.

4. The participation of special supervisors with teachers, principals and others in curriculum building.

5. The amount of consideration for the needs and growth pattern of the individual teacher and the degree to which the slower but more creative teacher growth is encouraged as opposed to lip service and unthinking imitation.

6. The degree to which provision is made for coordination of services among all those engaged in supervisory activities.

"The special supervisor must cease to defend his vested interests," Doctor Sexson stated. "He must look first at the child and his needs, at the total teaching-learning situation, at the objectives of the entire school program.

"We need specialists in education but we do not want specialized education."

Chambers Outlines Research Technics of Youth Commission

The three outstanding characteristics of the research program of the American Youth Commission, as listed by M. M. Chambers, are as follows:

1. The coordination and synchronizing of research technics take place on a large scale.

2. Individuals and communities are studied as wholes and the findings of many pertinent sciences and professional disciplines are taken into account.

3. Cooperation with other organizations and individuals at various social stations is wide not merely for fact-gathering but for stimulating thought and local and national action.

Studies of the C.C.C., occupational adjustment, the Negro adolescent personality and rural youth were approached by three or four selected methods and have been carried out in selected communities in different states and regions.

LINE-UP AT REGISTRATION BOOTH

Charges Traditional Schools Cause More Problem Children Than Do Modern

From 10 to 40 per cent of the children in a class group are in need of skilled individual guidance beyond that which the teacher can be expected to give.

This is the opinion of C. R. Rogers, professor of psychology, Ohio State University. It is based on various studies.

Schools that are traditional in their emphasis produce more problems of behavior and conduct than do schools with a more modern philosophy.

Doctor Rogers proposed five principles to consider in working out child guidance services. These are as follows:

1. Any satisfactory guidance service must be organized to screen out different levels of problems. The teacher can handle many of the simple problems. With consultation she can handle others. Only a small proportion of problem children need full clinical study and treatment, with psychological, medical, case-work and psychiatric assistance.

2. Any guidance service must deal with the whole child. He must not be split up among specialists. When specialists are needed, their services must be coordinated.

3. Guidance service should build the maximum relationship between guidance worker and child and between guidance worker and teacher. If the guidance worker flits from school to school, with no opportunity for sustained contacts, there is no hope of successful work. A broadly trained person should be assigned to one school to handle educational, personality, remedial and attendance problems and problems of home and family relationships.

4. Any guidance service must be closely linked with the personnel of the teaching staff. Conferences with teachers and inservice training should be a part of his work.

5. Specially trained personnel is needed. Good results are not attained through good intentions.

Community Study Is Aid in Improving Curriculum

Four general types of curriculum improvements may emerge from a survey of a local community, according to Dr. Henry Harap of George Peabody College. These are:

1. Doing better some of the things that the people are already doing, such as the improvement of the musical life of the community.

2. Filling gaps in the life of the community, such as the development of a Little Theater movement in a community.

3. Improving regional conditions that are defective, such as reducing the incidence of hookworm.

4. Extending some adult opportunities to include children of school age, such as giving children an opportunity to make gardens on the school grounds.

As many teachers as possible should be drawn into the group making the community survey.

GEORGE E. ROUDEBUSH, COLUMBUS, OHIO, AND Z. M. WALTER, WYOMING, OHIO

Visiting Teacher Soothes John and Sarah

John and Sarah Williams have always been a hindrance to their parents' pleasure. As victims of emotional neglect and cruelty at home, their school relationships are equally unsatisfactory. John's pugnacity wins him no friends and Sarah's uniform response is a negative one.

This is the type of situation that the public schools of Rochester, N. Y., set out to combat 28 years ago when it established a visiting teacher system. Helen E. Weston, director of Rochester's visiting teacher department, reviewed its accomplishments and aims for convention delegates.

The visiting teacher at Rochester is a trained social worker, interested in and acquainted with school problems and objectives. She is assigned to cases in which there is obviously some element in the child's life outside the knowledge and control of the school that is hindering his educational progress. This service, originally assigned to underprivileged neighborhoods, now extends to all elementary schools. The staff consists of 14 visiting teachers, a director, a part-time psychiatrist and three clerical assistants.

Whenever a visiting teacher accepts a child for study, she spends an exploratory period accumulating records to discover what motivates the troublesome behavior. Then she must plan a treatment program around the persons and factors in the situation.

As the case worker sees specific needs, she attempts to supply them. In the case of John and Sarah, the home is merely a cold physical shelter, so treatment must provide satisfactions in activities outside the home. A "Y" membership is obtained for John and an opportunity to join the children's group at the art gallery because he has ability in this direction.

Sarah finds outlet for some of her feelings as she hammers and saws in the Junior League school craft club. Her grade teacher, whose hobby is art, is told of Sarah's interest and lack of self-confidence, and thus another helpful relationship is stimulated.

Exhibitors Entertain Delegates

This year the Associated Exhibitors decided to do something different, so as their annual contribution to the convention of the A.A.S.A. they signed up the best entertainment possible. There was a whole evening of it, and such an evening! Judging by the throngs that taxed the capacity of the Atlantic City Public Auditorium hardly one of the 12,000 delegates failed to put in an appearance, lured by such headliners as Gladys Swarthout, grand opera and radio singer, the recently publicized "Quiz Kids" and the National Broadcasting Company orchestra under the direction of Harry Meyer. In accordance with their custom of presenting an American Education Award, this honor for 1941 was given Dr. Frank Pierrepont Graves, who has made an outstanding contribution in education.

Youths Under 21 Need Post Secondary School Training in Vocations

The development of regional or state vocational schools, post high school technical institutes and junior colleges in which rural youths under 21 years of age may obtain vocational training was proposed by Federal Security Administrator Paul V. McNutt in addressing the National Association of Secondary School Principals.

Although current circumstances are reducing the unemployment of older youths, it may be some time before all youths under 21 are absorbed in private industry, he pointed out.

The development of regional or state vocational schools of less than college grade will provide also for the present marked tendency to upgrade vocational training to higher age and grade levels.

Centralization of trade, industrial, technical and business education in the larger centers of population also will provide a partial solution for the problem of apprenticeship training in sparsely populated states, as apprentices from a variety of trades may come to the state trade schools during slack seasons to obtain the related technical instruction which is essential to a well-organized apprenticeship training program.

Genial Doctor Rugg Not Genial in Attack Upon His Opponents

In Philadelphia for the P.E.A. meeting, genial Dr. Harold Rugg of Columbia University in none too genial manner accused certain forces in the American Legion of making "a scurrilous attack on American education and, incidentally, libeling me personally."

Fourteen of Doctor Rugg's histories and social science textbooks, widely used in the public schools, have been "blacklisted" by a powerful group within the Legion for allegedly communistic teachings.

The P.E.A. arranged a half-hour radio debate between Doctor Rugg and one of his opponents, Merwin K. Hart, president of the New York Economic Council, over a Philadelphia station.

Reed Honored by Local Schoolmen

Dr. Carroll R. Reed, superintendent of the Minneapolis public schools and president of the American Association of School Administrators, was honored Friday evening, along with other large city superintendents at an informal buffet supper by the Atlantic City Schoolmen. As dean of the city superintendents, Dr. Frank Cody of Detroit presented a gold watch and chain to President Reed as an expression of appreciation from the Atlantic City public schools.

Industrial Jobs Are Satisfying to Workers, Says Governor Stassen

"A leftover worship of clerical and professional positions permeates many of our secondary schools to a great degree," declared Governor Harold E. Stassen of Minnesota in addressing the A.A.S.A. convention at the Monday morning session.

"We might think of work in many modern industrial positions as drab and routine and uninviting," he pointed out, "but if we enter a factory or mill or shop and step up to a capable workman and ask him what he is doing, what the relation of his work is to the finished product, we are pleasantly surprised at the interest, pride and satisfaction that the workman takes in the importance of his task and its relationship to the final product which fills a need or contributes to the pleasure of his fellowmen.

"This experience is all the more striking when we interview youths who have spent a few years in a fruitless attempt to fit into some useful place in the economic system and are still a part of the legion of unemployed.

"A proper appreciation of the part that all occupations play in the total scheme of things and the interpretation of that appreciation to the student body is an important part of successful education in a democracy."

Governor Stassen also emphasized the need for general education for the part that the individual must play in the social, cultural and political life of the nation.

"Oceans of Beauty" in Seating

There was not enough of the Atlantic Ocean outside the auditorium, so as a reminder to the convention crowds that they actually were at the shore resort a seating manufacturer presented as the feature of his exhibit "oceans of beauty" —in seating, of course. Behind a large glass panel the visitor was afforded a glimpse of undersea beauty, with lacy pieces of coral waving gracefully in the clear blue waters. Electric lights in turquoise greens and blues helped create an illusion and to attract attention not only to the undersea exhibit but to the variety of desks lined up for inspection.

Welcome to "Lazy Susan"

The "Lazy Susan," popular for many years with housewives, now makes an appearance in the modern home economics department. No waste space and no waste motion promise this product a long life and a happy one. Everyone agreed that it was miraculous how the pots and pans kept revolving right to the front of the cabinet door, eliminating the need for reaching and stretching.

ABOVE: SUPT. CHESTER F. MILLER, SAGINAW, MICH. RIGHT: ASS'T SUPT. J. W. LEWIS, BALTIMORE; H. W. CRAMBLET, PITTSBURGH BOARD OF EDUCATION

Even Convention Exhibits, 300 in All, Are Keyed to National Defense Program

With almost 300 exhibits to choose from, there was plenty to look at in the Atlantic City Auditorium. Manufacturers of school supplies and equipment and the numerous other organizations represented saw to that. There were plenty on hand to look these exhibits over, too, from the opening of the big annual educational show on Washington's Birthday afternoon to its closing six days later. It's always a good show at Atlantic City, and this year proved no exception.

As might be expected, the exhibit was keyed directly to the national defense program. Almost the first sight that greeted the visitor's eyes was the huge figure of Uncle Sam which dominated one exhibit by the door urging the importance of physical preparedness. Down one aisle after another the Red, White and Blue was conspicuously displayed, applied here to the shelves in a book exhibit and there to a long stretch of background. Elsewhere the Stars and Stripes fluttered in the breeze of a concealed electric fan. There could be no question that the present international emergency is paramount in the mind of every delegate.

It was a conservative show in many respects, following the usual pattern that gives first honors to the book publishers. They were a hundred strong with stalls both large and small to entice the educator. As though the schoolman has to be enticed into a book shop! He just naturally migrates in that direction.

What good are books without a place all their own. It was logical, therefore, to step from these miniature book stores to a streamlined charging desk designed especially for school libraries and to see more books displayed on book trucks as part of a modern library layout.

Transportation assumed new importance this year. Instead of the usual one or two such exhibitors, there were seven. Home economics equipment, too, was represented. Individualized kitchen cabinets played an important rôle in these shows.

There was business in the show as well, judging from the enthusiasm displayed by the exhibitors. These thousands who came stayed—and bought—some of them, at least. Where they did not buy they left their names and addresses for further information to be sent them.

All delegates asked questions, which is important, because it is only by asking questions that we learn, and this is, after all, an educational show.

Educators Must Prepare Youth for Marriage, Shuster Says

Even though marriage determines the success or failure of more young people than any other factor, education deals with this relationship amateurishly, Dr. George N. Shuster, president of Hunter College, told the National Vocational Guidance Association.

He declared that educators must realize that successful living is the result of developing aptitudes both for employment and for satisfying social relationships.

"We have begun to understand that if America is to be what we hope it is to be, it will destroy neither culture nor technology," Doctor Shuster said.

SUPTS. FRANK A. JENSEN, LA SALLE, AND M. E. STEELE, MENDOTA, ILL.

Pays Tribute to Graves as Greek Scholar in Giving Award

"Frank Graves as a Greek scholar understands the ancient heritage of freedom which is the basis of the civilization that free men are called upon to defend today."

Thus did President Carroll R. Reed of the A.A.S.A. pay tribute to the recipient of the American Education Award in his presentation for the Associated Exhibitors to the former New York state commissioner of education.

"For those of us who prepared for college the hard way, by studying three years of Greek and four years of Latin, it seems fitting to honor the man who could guide us through the Anabasis, the Iliad and the Odyssey. However, in these days there are other reasons for honoring the Greek professor.

"The gallant fight which the Greek soldiers are making today rekindles our interest in the ancient Greeks and their historic stand against the Persian hordes on the battlefields of Thermopylae, of Marathon and of Artemisium. We appreciate the words of the Greek poet Pindar who said of one battlefield:

" 'There the sons of Athens set
„The stone that freedom stands on yet.' "

Trow Points Out Distinctions

The distinction between psychology, social psychology and sociology is viewed by William Clark Trow, University of Michigan, as one of emphasis, the psychologist being primarily concerned with the individual, the sociologist with the group and the social psychologist with the individual in relation to other individuals or to groups.

Just the Right Air

No question but that the scene which one exhibitor staged brought memories of home to many who passed by. It also reminded them of the benefits, the necessity even, of proper ventilation. A teacher was standing by a classroom window, which looked out on a wintry scene, almost as wintry as the sight of the Boardwalk covered with snow which greeted the delegates as they stepped outside the Auditorium. But inside all was warm and comfortable. This was evident by the happy faces of teacher and students. On the sill of the window beneath, which was the source of all the satisfaction, was a growing plant.

Adminstrators Would Strengthen Democratic School Practices

(*Continued from page* 33)

laid upon the need for strengthening and improving the internal processes of democracy for which gigantic protective preparation is being made.

Both in the Progressive Education Association meetings at Philadelphia and in the Atlantic City meetings speakers did not spare current social, economic and spiritual shortcomings within the country.

Leaders of educational, labor, political and social thought were almost unanimously insistent that the second phase of national defense, just as important as preparation against possible external aggression, was improvement of the public schools and other social agencies to strengthen democratic practices. The general tenor of lobby discussions was also different from that of the 1940 meeting in St. Louis, in that there were much more realistic understanding of the Western Hemisphere's position in this world revolution and less talk of isolation possibilities.

Exhibits opened on Saturday. The preconvention meetings were devoted to a joint afternoon conference on teacher education and to a general C.B.S. radio broadcast Saturday evening on the subject of "Are Our School Textbooks Subversive?" Prof. Lyman Bryson was discussion leader.

Supt. H. M. Corning of Omaha and Prof. H. E. Wilson, Harvard University, represented the educators while Melvin K. Hart and O. K. Armonstrong represented the interest groups that have been attacking certain social science texts during the past year.

Musical features of the meeting were the Henry Holtz Madrigal Singers, who presented a concert of American music Sunday evening, and the N.B.C. orchestra and Gladys Swarthout at the Tuesday evening concert, sponsored by the Associated Exhibitors. The American Education Award was presented to Dr. Frank Pierrepont Graves at this meeting by President Carroll R. Reed of the A.A.S.A. The Detroit Schoolmen's Chorus, under the direction of Howard A. Love, broadcast over C.B.S. on Monday afternoon, furnished the musical programs for the Wednesday evening general session and the University of Michigan breakfast.

The general sessions featured big names and general information and provided inspiration. The real work of the convention took place in the 33 smaller afternoon discussion groups on Monday, Tuesday and Wednesday.

Much interest developed around the major yearbooks presented at these meetings. The National Society for the Study of Education discussed "Art in American Life and Education" Saturday evening, an indication of the increasing interest and importance of the fine arts in the general curriculum.

"Education for Family Life," the 1941 Yearbook of the American Association of School Administrators, was effectively dramatized at the Wednesday morning general session under the direction of Dean E. W. Jacobsen, University of Pittsburgh, chairman of the Yearbook committee. This production admitted the specialized nature of public education and strongly recommended cooperation with and participation by the home in the education of children and youth.

The thirteenth yearbook of the Department of Supervisors and Directors of Instruction, prepared under the chairmanship of Prof. Paul Witty, Northwestern University, considered "Mental Health in the Classroom."

Doctor Eurich Upholds Modern Education and Scores Critics Sharply

Prof. Alvin Eurich, acting dean of the school of education, Stanford University, told the Progressive Education Association meeting in Philadelphia that so much evidence in favor of modern education had been accumulated that its critics had better either collect some equally good evidence against it or keep still.

Summarizing, from long-term studies, the evidence in favor of modern education, he suggested that its opponents were not in favor of similar studies in their own field.

Doctor Eurich summed up criticism of progressive education in four major points: (1) that it does not develop loyalty, (2) that it does not discipline the individual, (3) that it does not result in good citizenship and (4) that it fails to develop leaders for democratic society.

Concerning loyalty, he commented, not much evidence had been developed on either side, although his impression was that "we are developing it to a greater degree."

On the question of discipline it was not clear what the critics meant, but there was a considerable body of evidence that when progressive and conservative children of like ability were compared in tests in reading, writing, arithmetic and information the results were equal.

Critics had no basis in fact in saying that discipline was not being developed, he declared. Some were concerned with the subsequent achievement in school of those subjected to modern practices. As to that, he described a comparison in California between 100 modernists and 100 traditionalists in an elementary school in which tests and grades showed that the modernists exceeded expectations in achievement by two or three months, whereas the traditionalists were at the level expected.

"The critics of modern education are basing their criticism on their biases and prejudices," Doctor Eurich continued. "They are living in the horse and buggy days of education. The old methods did teach reading, writing and arithmetic. The modern gives us comparable achievement in less time and thus gives more time for improvement of social attitudes, cooperative initiative and ability to work together."

Quick-Quiz Won Crowds

"Stop and have some fun." It didn't require a second invitation for visitors to step in and take the quick-quiz, comprising questions keyed to Atlantic City and the convention. Then they watched with much curiosity and excitement the grader score their answers, which was the reason for the invitation in the first place. "Try taking a test." Of course they did, large numbers of them.

Pennsylvania Study Mixes Several Research Methods

In the interests of home rule for education, Mort and Cornell made an observational study in Pennsylvania that was reported in the volume, "American Schools in Transition."

Paul R. Mort explained their procedures to the American Educational Research Association and summarized their point of view as follows:

"We believe that any project designed to study the operation of only one cluster of factors, such as state-local relationships, without considering such variables as customs, leaders, attitudes and teacher inbreeding will run into serious if not insuperable difficulties. One set of factors, such as methods of finance, teacher supervision or allocation of control, may be profitably singled out for attention provided the community setting is not neglected.

"An investigation of the operation of a selected cluster of factors in conjunction with other factors would seem to require intensive studies of school systems in their community setting. Profitable research in the factors influencing adaptability is to be had through intensive study of individual communities. Some of the newer statistical methods provide a splendid thinking machine to simplify the almost infinitely complex situation that such study involves in a manner that will clarify consideration of relatively imponderable data rather than restrict it."

N.E.A. SECRETARY AND MRS. W. E. GIVENS

W. G. ECKLES, MISSISSIPPI; JOHN NICHOLS, CONNECTICUT

School Book Publishers Organize Investigation of N.A.M. Text Charges

The School Book Publishers National Association, meeting concurrently in Atlantic City with the A.A.S.A., strongly objected to criticism of textbooks made by Prof. Ralph W. Robey of Columbia University in a conference at which E. L. Bowsher, superintendent, Toledo, Ohio, presided.

At the close of the conference, Superintendent Bowsher gave out the following statement:

"It is the consensus of this group that the charge made by those representing the National Association of Manufacturers cannot be substantiated by truth, that we believe there are few if any of the texts used in the schools deliberately or otherwise written to break down the American plan of life.

"A committee consisting of representatives of five leading publishers was selected to contact the N.A.M. and go into the matter of these charges specifically."

During the conference the chairman questioned the honesty of some of those who have been making charges against the textbooks and gave his opinion that the real issue was that certain entrenched groups were interested in cutting the cost of the schools.

"Are you willing to accept charges that you are a lot of Communists?" he asked.

Mr. Bowsher said that if educators had not permitted themselves to drift somewhat away from the public "we wouldn't be on the spot now."

The textbook issue continued to be very much alive in the main convention, which heard a radio forum discussion of the subject on Saturday evening. One of the members of the forum, Supt. H. M. Corning of Omaha, said that the program of the N.A.M. for the study of textbooks was on a high plane as it originally was set up but that "something had slipped." "They set out by saying that they would not evaluate but would give a factual service."

Professor Robey has made sweeping charges, however, said Mr. Corning. "If he did it on his own the manufacturers were not to blame." He added that he had no objection to anyone investigating textbooks. "We in the schools should welcome any investigation. If anything is discovered that is not right we will be the first to condemn it."

Meanwhile Richard Feier, author of "Elements of Economics," one of the textbooks asserted by Professor Robey to be unduly critical of elements in American political or economic institutions, replied to his critic, attacking his methods as unscholarly and unjustified.

SUPTS. S. T. NEVELN, AUSTIN, MINN., AND R. C. BURDICK, HUNTINGTON, N. Y.

Federal Aid, Federal Control

Those who insist that state or federal governments can provide substantial aid to public education without controlling its programs are either following wishful thinking or are deliberately not facing the facts, R. L. Johns, Alabama State Department of Education, told the A.A.S.A. No system of state support has yet been devised which does not substantially affect directly or indirectly programs of public education provided by local school units. The federal government also will continue to assume an increasing control over public education regardless of whether or not it increases its appropriations for the support of public education, in his opinion.

R. E. DUGDALE, PORTLAND, ORE.

If You Want Your Child to Be a Fine American Citizen, Be One!

"If you want your child to be a fine American citizen, be one!" advises Angelo Patri, nationally known New York City elementary school principal.

Parents in their position of leadership and responsibility should not want the training of their children to be pushed out of the home and into the school and the church. "Home is the cornerstone of the whole social structure. Home has the first and the last word in all that concerns its children. All other forces are secondary," Mr. Patri states.

The basic experience children meet and need is obedience to parental authority. It must be wise, kind, firm, having as its first cause the good of the child, present and future, according to this teacher and columnist.

The next important thing to remember is that home must be shared with children. It must make room for their expanding needs. Each year of growth should be marked by closer family intimacy, deepened interest, greater responsibility upon the children.

The Better to Hear With

No reason for any delegate returning to his school post with the excuse that he did not hear this or that. If he suspected he was missing anything all he had to do was to step up to the booth where he was invited to have his hearing tested. This demonstration of hearing tones was simply and effectively made by placing an instrument first at one ear and then at the other and listening to the tinkle of chimes from colored pipes on the wall.

Sees Expansion of Work for Women

Because of the defense program, expansion in the fields of work for women is coming, but it will be necessary for the available supply of male labor to be absorbed before any appreciable demand will be felt for women in the new operations. This is the opinion voiced by Mary H. S. Hayes, director of the division of youth personnel of the N.Y.A., who addressed a discussion group of the Council of Guidance and Personnel Associations.

Council for Exceptional Children Meets

The opening day's program of the nineteenth annual convention of the International Council for Exceptional Children, which met February 20 to 22 at the Hotel New Yorker, New York City, consisted of trips to public schools, conference clinics and an open meeting at which the principal address was given by Prof. John Lee of Wayne University, Detroit, on "Greater Unity in Special Education."

Fears Shortage of Engineers Will Stymie Defense Program

Defense industries in the New York area alone will need at least 7500 more engineers between now and next October, Dr. James Creese, vice president of the Stevens Institute of Technology, told the National Vocational Guidance Association.

About 6000 of these will be needed in aircraft plants and 1500 more will be required in 17 other types of defense industry.

Since engineering schools turn out only about 12,000 trained engineers per year and the technical schools in and near New York graduate only 1200, Doctor Creese fears that this lack of engineers will create a real "bottle neck" in the defense program.

High School Programs Should Permit Youths to Hold Jobs While Continuing Education

National defense training programs in secondary schools should be concentrated on the twelfth year pupil of the senior high school and on the unemployed out-of-school youth.

While there is a great shifting of workers from one occupation to another and while there are hundreds of occupations for which the school can give no adequate training, there is still no reason to take a defeatist attitude and to say the task is impossible for the schools.

This is the belief of Supt. Pliny H. Powers of industrial Youngstown, Ohio, who spoke before the discussion group on Monday afternoon.

Employment opportunities are available in specific jobs that require specific training, Superintendent Powers pointed out. His proposal is that the high school enter this field of training for definite semiskilled jobs.

"We must discard our old ideas about credit, semester length courses and the necessity for full-time instructors to make these courses function," Mr. Powers asserted.

"We need capable teachers and we must go to the community, to business, to industry and literally requisition outstanding people who have skills and knowledge that they will share with young people. With a little skillful supervision their work is amazingly effective.

"High school authorities should recognize part-time work experience as a valuable educational asset. No high school program should be so rigid as to prevent a boy from holding a job and continuing his education. Every principal should assign some faculty member to the task of seeking part-time employment for pupils."

High Schools Can Provide Vocational Preparation, Not Training, Says Hunt

Are schoolmen, in their enthusiasm for national defense, enmeshed in the mechanisms of vocational training to the exclusion of other equally, if not more important, avenues of approach in defense education?

Supt. Herold C. Hunt of Kansas City, Mo., thinks that is the temptation.

In education for the common defense there are three major highways, says Mr. Hunt: (1) democratic defense; (2) vocational defense, and (3) health defense.

In attempting to provide, almost in advance of their years, skilled technicians for defense industries, the high school must not lose sight of its basic objective of producing, first, true citizens of a democracy, Mr. Hunt declares.

He sees a vast difference between vocational preparation and vocational training. The former is within the province of the high school, as it is concerned with the development of good work habits, pride in accomplishment and ability to see a job through. The latter should be reserved for the specialized defense schools or actual job experience.

In the realm of health defense, thinks Mr. Hunt, the high school curriculum should be adjusted for a major offensive.

Foundations of physical fitness for military service and for healthful civilian living in times of stress should be strongly laid in the secondary school, as well as a knowledge of essential health information and remedial measures.

The best defense of democracy is a nation of healthy, well-rounded individuals, capable of critical thought and with ability for problem solving.

The high school curriculum should be designed to turn out such individuals and high school education should provide an endowment of complete understanding of the democracy to be defended, Mr. Hunt concludes.

Outlines Program for Training American Women for War Work

Mrs. Arthur Turner, American-born wife of an Englishman, who left London last year to become national director of instruction for the American Women's Volunteer Service, outlined for the National Association of Deans of Women the problems women must face in modern warfare.

She said the women of the United States joining up with the service will be divided into nine regions corresponding to the Army Corps areas and that a series of courses will be conducted in calisthenics, communications, leadership, motor transport and repair, map reading and such emergency services as air raid precautions and first aid.

Vocational Defense Training Is Complicated Problem for Labor

Labor always has supported public education. The reason is easy to determine: the children of working people depend upon public education for their opportunity in life.

The foregoing is the opinion of Ralph Hetzel Jr., director, unemployment division, C.I.O.

The field of vocational and mechanical training offers complicated problems to labor since it not only involves the opportunity for children of the working people but also affects the labor supply and thus in many ways the level of wages, he explained.

Two fundamental principles should govern such programs:

1. Additional defense training should be instituted only when necessary to meet clearly indicated needs.

2. Training programs should be instituted only with the fullest participation of labor and employers in the planning and operation. Control should remain in the hands of the regular school authorities. This applies both to regular programs and to the special defense training.

Says German Apprentices Exceed Ours by Eight Times

More apprentices and more school facilities for apprenticeship *now!*

That is the demand of J. C. Wright, assistant U.S. commissioner of vocational education, Federal Security Agency.

Germany has eight times as many apprentices as has the United States, Mr. Wright told the school administrators. It will take two years as a minimum and more often four years to bring apprentices to the journeyman or skilled craftsman stage. Nothing must be left to chance.

Schoolmen can be of much help to the people in their communities, to the state and to the nation, according to Mr. Wright, in the following ways:

1. Select the most competent and experienced directors of vocational education that can be attracted.

2. Appoint representative trade advisory committees that are willing to work cooperatively for the best interests of emerging American youth.

3. Provide adequate housing and equipment not only for all-day classes but also for apprentice classes.

4. Keep fully informed and keep teachers informed on the latest trends in apprenticeship and other forms of vocational education.

Typewriting Is Now Taught "Whole"

The "whole" method of typewriting apparently has some advantages over traditional methods of teaching typewriting. Jacob S. Orleans of the College of the City of New York reports as follows:

"In this study several groups of pupils were taught to typewrite by a whole method in which they typed only continuous context from the start and had to learn at the start the keys for the 26 letters of the alphabet, the shift key, the tabular key, the comma, the period and the question mark.

"After adequate mastery of these keys was achieved, they learned as part of the one task the keys for the numbers and, shortly thereafter, some 12 more keys for the special characters."

Achievement in all such groups was high in both speed and accuracy. In cases in which the class was taught by a teacher who also taught another class by a "simple-to-complex" method, the whole method group exceeded the other in both speed and accuracy.

One ninth grade class with the average I.Q. of 91, taught by the whole method, was approximately 10 per cent better in speed and accuracy than a second group taught traditionally by the same teacher.

In teaching by the whole method the teacher has to learn many new technics in handling the class entirely apart from the newness of the method of teaching itself. Classroom procedures and management are different for the two methods.

Harvard Teaches High School Principals by Activity Method

Harvard has an activity program that it finds useful in developing secondary school principals.

This activity program, according to Warren C. Seyfert of Harvard Graduate School of Education, has three parts:

1. Every student in school administration who has not actually been a school administrator must serve an administrative apprenticeship.
2. Every student is a supervising principal for one semester of a group of practice teachers working in the schools in the vicinity.
3. Students and a few practicing principals are organized into a research group which each year studies a problem of immediate concern to the schools represented in the group.

New National Economy Must Not Catch Schools Napping

Chief among the critical issues to be settled in public education are conditions of school finance and fiscal control, thinks Francis G. Cornell of the Federal Security Agency.

Within a matter of a few months we may face an infinite number of insuperable difficulties, owing to the exigencies of a highly unstable world economy.

To meet this uncertain future we have at least the intellectual resources that have been accumulated in a quarter of a century of research, Mr. Cornell asserts.

The time may soon be at hand when all the intellectual and mechanical facilities produced by significant researchers in the field will have to be mustered and coordinated in an effort to provide an adequate educational service in a new economy.

Heaton Suggests Ways to Find Who Is Ready to Enroll in College

How determine when a student is ready for college?

College entrance requirements are under fire. Scholastic aptitude is not limited to the characteristics measured by intelligence tests. Nor is the judgment of high school principals dependable in such cases.

Kenneth L. Heaton, Northwestern University, thinks the solution involves increased consideration of the student's ability to read and study college materials, his ability to solve intellectual problems, his motivation to learn, his physical and mental health, his ability to act independently and a variety of other factors.

High schools and colleges can turn to research data on the foregoing factors for a positive approach to the problem, Doctor Heaton asserts.

Extroverts Are Good Teachers, Introverts Are Good Scholars

The more successful student teachers at the University of Minnesota are social extroverts, *i.e.* they tend to seek social contacts and to depend upon them for satisfaction.

Students whose scholastic achievements are high are thinking introverts, *i.e.* they have a liking for reflective thinking particularly of a more abstract nature.

Catherine Evans of the evaluation staff, Bennington College, reported on an inventory constructed to measure three types of introversion-extroversion —thinking, social and emotional. The test was administered to 396 seniors in education, University of Minnesota.

Personality Test Needs Readily Visible Goals, According to McCall

A comprehensive personality test designed to promote growth in personality should set up readily visible goals. However, it should not have norms until the world exhibits more evidence that the average personality and the personality of leaders approved by the masses are perceptibly above those of brutes.

William A. McCall, professor of education at Teachers College, Columbia University, made the foregoing observations in addressing the American Educational Research Association.

Doctor McCall's envisioned personality test will be student administered, student timed, student scored, student interpreted and student operated generally so as to save the teacher's time for guiding the students' growth.

The well-designed personality test will comprise traits believed to be improvable by effort, not those like native intelligence and statute, which may be relatively unmodifiable.

It will deal with normal traits appropriate for use in typical classes, not traits symptomatic of abnormal types such as are the primary concern of psychiatrists.

It will foster the idea that personality cannot be policed into pupils, that school marks have no place in this half of education, that the most important portion of every personality is concealed from the teacher or counselor who fails to maintain rapport and who does not treat confidences as a physician treats them.

Recommends Statistical Method

If a city school system wishes to estimate differences in achievement among pupils sent to a senior high school from several junior high schools, the method of analysis of covariance is recommended by E. R. Enlow, director of statistics and special services in the public schools of Atlanta, Ga. This method tests the statistical significance of average marks after allowance has been made for differences in average ability.

Urges Special Art Teacher for Grades

The platoon organization is desirable for art teaching in elementary schools, contends Leon L. Winslow, director of art education, Baltimore. Where the greatest number of children is enrolled art instruction is usually poorest because art is generally taught by the classroom teacher with meager or no preparation to teach it. A special art teacher will eagerly bring to the classroom material contributing to the art program.

Depicts Characteristics of Child Who Is Gifted in Art

Characteristics of the drawing and art appreciation of gifted children were summarized by Betty-Lark Horovitz of the Cleveland Museum of Art for the American Educational Research Association.

Children with special ability in visual arts, she asserted, do not differ in general from average children of the same age and intelligence level. "Specials" in their drawing go through the same developmental stages as average children but do it in a markedly shorter time.

While the majority of average children do not reach the last developmental stages of drawing at all, specials do so. In spite of their accelerated development, specials evolve a richer, more varied graphic vocabulary. They respond more readily to suggestions and actual instruction in drawing than do average children and are more ready to learn. They interpret and assimilate, in an original way, influential material and actual teaching. They show rare qualities of an esthetic nature.

Children gifted in art respond consciously to esthetic and technical qualities in a work of art, while average children are likely to respond to the subject itself or to associative factors of a nonesthetic nature.

Exhibitors Feature Birthday Anniversaries in Two Booths

Two manufacturing companies took advantage of the show to receive the felicitations of their friends, one on its thirty-fifth anniversary and the other on its sixty-first.

The senior, in a red, white and blue setting, pictured its original modest home and also its present modern building, while in the center was the national capitol with the Stars and Stripes waving in the breeze. It was very effective; patriotic, too.

The other birthday celebrant whose business career has been devoted to making things better and brighter went the full figure and displayed its entire line of electric floor machines; also a new member of the line.

Good Seeks New Scientific Method

Wars and economic crises have shown that science can be used for destructive and wasteful purposes rather than for progressive improvement of the conditions of life.

Carter V. Good, professor of education, University of Cincinnati, believes that possibly the next forward step toward an improved scientific method will be through a combination of the present scientific method with social understanding.

FRANCIS L. BAILEY, PRINCIPAL, WESTERN STATE NORMAL SCHOOL, GORHAM, ME., RIGHT, AND UNIDENTIFIED COMPANION

Education System of France One Reason for Its Collapse

Genevieve Tabouis, former editor of the French newspaper *L'Oeuvre* said one reason for the French collapse was because the educational system of France not only fell short of its possibilities but in its time played a sinister rôle. She addressed the P.E.A. meeting in Philadelphia.

"French children never really have been taught how the Republican system occurred in my country," she said. "In France, children were taught contrary to the principles of the French revolution" by French educators who "generally were appeasers."

SUPT. FRANK CODY OF DETROIT

Watch Dental Decay, Mental Hygiene and Nutrition, Urges Wilson

Nutrition, dental decay and mental hygiene—these three factors require special consideration in the coming years if schools are to lay the foundations for physical fitness, according to Charles C. Wilson, director of health and physical education, Hartford, Conn.

Our children need simple practical directions for eating the right kinds of food. They need helpful advice concerning how the right kinds of food can be economically purchased.

Dental decay is the most prevalent disease of childhood and until further means of preventing it are discovered we must concentrate on getting children and adults to have frequent regular dental examinations and such treatment as is indicated. We must provide adequate treatment facilities in all communities and direct pupils and parents to places where treatment may be obtained.

We must teach pupils a mode of living conducive to mental health. We must study the effects of school procedures on mental health and we must give increased emphasis to education in recreative types of activities.

Doctor Wilson concluded: "We are thinking now of physical fitness as a part of national defense, but let us remember that we are planning a long-time program."

Youth Surveys All Agree on Two Points: Philip Boyer

Youth surveys and follow-up studies agree upon at least two generalizations, according to Philip A. Boyer, research director of the Philadelphia public schools. These are:

1. Youths no longer look to the school for guidance after they leave.
2. Society has made little progress in meeting the technological conditions that underlie unemployment, maladjustment, frustration and crime.

Both of these indicate the need of thorough-going placement and follow-up services combined with educational, social and economic planning, Mr. Boyer contends.

Would Experiment in Civic Education

A national curriculum commission to map out a series of carefully planned programs of civic education for different groups of young people in different types of situations is an idea advanced by J. Paul Leonard, associate professor of education, Stanford University. These programs should be tried out experimentally, he thinks, and every high school faculty ought immediately to analyze its own progress.

Lure of Totalitarianism Must Be Neutralized, Says Theodore Brameld

"To formulate a philosophy that will be strong enough and desirable enough to neutralize the lure of totalitarianism is a principal task of American education."

Theodore Brameld, associate professor of educational philosophy, University of Minnesota, made the foregoing statement in discussing the relations of philosophy to science in education.

The "absolutists" are justified in demanding order and purpose for American education, Doctor Brameld declared, "but they are wrong in their solution. The cure of the absolutists is likely to be more dangerous to democratic education than the disease, for its intuitional and arbitrary character may be adopted for unscrupulous ends."

The only hope, in Doctor Brameld's opinion, is to seek a philosophy that aims to establish reliable generalizations and presuppositions of being, truth, good and beauty within the circumference of an evolving world.

Gove Declares Democracy Must Indoctrinate Child

"Democracy must indoctrinate in terms of its own institutions and values and must view the school as the chief agency to be used for this purpose," declares Floyd S. Gove of Oberlin College.

"Under a laissez-faire policy, teachers who are attempting to bridge the gap between school experience and life face an almost hopeless task. Those who trust to a rounded general education to provide a sane and rational solution for difficult problems in both individual and social living may be paving the way for widespread acceptance of a totalitarian philosophy.

"In primitive society, a 'learning-to-do-by-doing' type of education might proceed with some degree of success without a predetermined plan and with a minimum of indoctrination. In a highly civilized society, someone has to decide what the child is to do in order to learn and through indoctrination, ritual or the mere arrangement of his surroundings what he is to learn," Doctor Gove maintains.

Picks Flaw in Propaganda Analysis

Propaganda analysis neglects the important task of reconditioning standards. Stereotypes are removed not by logic but by reconditioning, according to Harold Saxe Tuttle of the College of the City of New York, who discussed recent developments in the psychology of attitudes.

More Help for Poor Readers

Poor readers need material suited to their actual reading ability.

Particularly to serve these E. W. Dolch of the University of Illinois reports a study of eight series of graded readers to establish grade norms for (1) sentence length, (2) word length and (3) word difficulty.

Books that are not school readers may be compared with these norms so that one may say a particular book is fourth grade in sentence length, third grade in word length and fifth grade in word difficulty.

As new graded readers appear, figures from them will be combined with those from present readers, so that gradually changing but ever up-to-date norms will be kept.

It's a Mistake to Slight Handwriting, Freeman Says

Handwriting does not deserve the disrespect now accorded to it, asserts Dean Frank N. Freeman of the University of California School of Education.

It is a serious mistake to think that writing no longer has utility value, Doctor Freeman holds. A person without a pen or a pencil would be seriously handicapped every hour of the day.

Writing also has a broader and more fundamental value, as written language plays an important part in general mental development. A teacher of writing should keep these values in mind and should promote them in two ways, says Doctor Freeman:

1. Encourage a type of writing that is a fluent expression of thought and does not divert attention from it.
2. Take every opportunity in instruction and handwriting itself to promote the larger values as well as skill in penmanship.

How Valuable Are Workshops?

Accomplishments listed by 47 students who were registered in Stanford University's Evaluation Workshop were, in order of frequency: (1) became acquainted with new materials; (2) clarified my points of view; (3) made plans to experiment in my work; (4) made plans for evaluating my own program; (5) acquired materials and bibliographies; (6) made plans for classroom procedures; (7) made plans for the total school program; (8) developed tests to be used next year; (9) constructed curriculum units, and (10) made plans for evaluating the total school program. This is one of four professional workshops at Stanford the technics of which have been appraised by Alvin C. Eurich, professor of education.

History and Languages Help Socially; Physical Sciences Apparently Not

Does taking "courses" in school or college contribute toward an actual change in social behavior?

To find out the extent to which formal education functions in life, Charles C. Peters, professor of education, Pennsylvania State College, applied two statistical technics to an investigation of the problem.

Doctor Peters found that the study of history correlates moderately well with social leadership, with a wide range of knowledge and with conversational ability. The taking of English literature, too, correlates fairly well with good English usage, reasoning ability and conversational ability. Going in for modern languages seems to aid in developing the same characteristics as the study of literature.

However, the correlation between the extent of study of the physical sciences and ability to make enriching interpretations of phenomena and with ethical sense was zero and was negative with all the other abilities investigated, such as good English, reasoning ability, social leadership, conversational ability and grace in manners. The study of biological sciences showed up only a little less badly in the correlations, Doctor Peters discovered in his study.

Soper Pictures Mission of Research in Defense Program

"In the desire to be up and doing, many things of questionable value will be undertaken in the name of educational defense," declares Wayne W. Soper, chief of the bureau of statistical services, New York State Education Department.

"Research can render education an everlasting good by an unwavering insistence that the old be not discarded or the new be not accepted without scientifically controlled experimentation and unbiased evaluation."

Doctor Soper expects the schools, as their part in the national defense program, to redouble their efforts to produce physical fitness, social fitness and true devotion to democracy.

Arrowood Studies Slave Plantations

How successful was the American plantation as an agency of education for the slaves? At its worst, it was a school for ruffians. At its best, though limited, it produced men and women of fine character, sensibility and skill. So states C. H. Arrowood of the University of Texas. At best and worst, for more than 200 years the slave plantation was a maker of Americans.

Program for Defense

JOHN W. STUDEBAKER

U. S. Commissioner of Education

I WANT to suggest the importance of two elements in an educational program for the common defense: (1) the expanding program for vocational preparedness and (2) the developing program designed to create moral and spiritual preparedness.

Most of you know that the schools and colleges of America have been engaged in a greatly expanded program of vocational training for national defense industries since July.

By next July we expect to have trained nearly one million defense workers in the skilled and semi-skilled occupations, in addition to those who are regularly trained in vocational schools and classes. The far-flung training facilities of hundreds of schools and engineering colleges throughout the nation have been utilized to train more than half a million workers to date. More than half of these workers were taken from the rolls of public employment offices and the W.P.A. to be given pre-employment "refresher" courses, courses designed to restore or adapt previously attained skills. The time is not far off when personnel directors of rapidly expanding industries will be, figuratively speaking, waiting impatiently at the portals of our training centers to escort every trainee who completes his course to a place in industry.

We have been cautioned against training too many workers or expanding too rapidly toward twenty-four hour utilization of vocational training plant facilities. Upon the advice of employment services and other agencies we have moved cautiously, carefully exploring the active demand for workers before enrolling the learners. Yet some of us have felt all along that it would be better to have too many trained people than not enough. We were convinced that America could use all the skill, ability and competence we could possibly muster. How right we were is becoming perfectly obvious!

I am proud of the fact that the professional leaders in educational administration and especially in the vocational branch of education demonstrated foresight and practical vision. The real demands they anticipated are here. I wish that our theoreticians and logicians could be counted upon to be as realistic.

The fact that so many analysts, economic, social and political, have underestimated and miscalculated the direction and velocity of present trends seems to suggest that academic training would lead to straighter thinking if it were more generously seasoned with the practical disciplines of vocational training or, at least, with a more intimate acquaintance with industrial life.

A few academicians look down their noses at vocational training, disdaining to call it education. I believe that young people who have acquired some practical skills, who have learned to combine some general education and disciplined hands in a productive accomplishment, are better prepared to approach the hundred best books than the learner whose primary contact with the world of reality is merely through word symbols.

A word here about the speed with which this defense training program got under way may add to our confidence in the democratic process and in our profession. Three days after the first appropriation was made for the training program, classes in many parts of the country were beginning to assemble. Within thirty days 60,000 persons were enrolled.

This huge training program has been financed to a considerable extent with federal funds channeled through the U. S. Office of Education and state boards for vocational education to local school systems and also to engineering colleges. For the purposes of this program the United States has become one vast school district. It depends directly upon the school systems of these states and communities, with their investment of more than a billion dollars in technical school plants and equipment. Although nationally financed, it is democratically managed and administered with the wholehearted cooperation of educational authorities and advisory committees representing labor and management at national, state and local levels.

Federal aid is not a device for forcing educational policies and practices into a mold cast in Washington. In our democracy it must be viewed as a means of releasing the imagination of a million trained educators and facilitating the making of plans that will more effectively meet the real needs of youths and adults. No commissioner of education can judge those needs as accurately as the superintendents, the principals, the teachers and the people whose needs are served in their home states.

Upon the schools and colleges rests a heavy weight of responsibility for the spiritual defense of America. How can they discharge this responsibility?

First, we must continue as in the past to provide youths with the facts upon which to base intelligent judgments. Through careful training in evaluating evidence in the difficult realm of social, political and economic problems, youths must learn to distinguish dishonest propaganda from honest advocacy.

Second, schools and colleges must feel a new and greater obligation to communicate a genuine loyalty to the ideals of true democracy, a sense of the spiritual values of our shared activities and aspirations.

To do this we must provide for the expression of patriotism through participation. Personal adjustment, employment, normal family life, reasonable hopes for a better future, plus participation in the common social enterprise, constitute the best guarantee of loyalty to democracy.

What of the future? We must begin now to look ahead to the world reconstruction which must follow upon a democratic victory. We must begin now to prepare both youths and adults to help form that public opinion which will ensure the organization of the peace upon an enduring basis.

The need for citizenship education is so acute that we ought now to bring the strength of federal aid to this enterprise, particularly in the field of adult education. Here, again, the methods we follow are quite as important as the goals we seek.

Ours Is the Great Job

A Long View of National Defense

FREDERICK H. BAIR
Superintendent, Bronxville, N. Y.

IN THE interests of clear thinking, this word "defense" seems to me to be about 90 per cent misplaced as applied to the secondary schools (and 110 per cent misplaced as applied to a nursery school, as I heard it last week). It means, to me, that we tend to lose our grip on the nature and function, in war or peace, of our proper business, education.

I am just as concerned as anyone else that the United States shall be prepared to defend itself in a military way, but I do not believe that that is, in any really important degree, the business of the schools. Whereas, precisely because the world is in this mess which will require the best we can do, now and hereafter, to straighten out, the patient, slow, fundamental, in-forming work of education needs now to be prosecuted with all that we can summon of insight and courage.

This notion of everyone's doing his own job in the form of skilled and experienced service to society, with particular fidelity in the face of threatened or actual attack, I would erect into a general principle as the first requisite of defense.

Schools Contribute Stability

It is no small contribution to stability and defense, at a time when our whole adult population is psychologically upset, to maintain in a steadying routine one fifth of our society, which is what the schools do in their daily work.

While it is important that the butcher, the baker and the candlestick maker mind now their own business more than ever, and do not abandon their usefulness to run like boys to a fire, in the case of the teacher there are considerations in addition to and above those of military expediency, considerations of what might be called long-run defense, which urge that he stick to his teaching.

The job of the soldier and that of the educator are two quite different aspects of defense: the soldier fights to rectify blunders already made; the educator teaches to minimize the likelihood of their repetition. Confusing in our minds the functions of military defense with the functions of education will not promote the effectiveness of either.

I have scant patience with those professors who turn the campuses of teachers into little Plattsburgs and vortices of war hysteria. The American schoolmaster needs to read less of the *Tribune* and more of Emerson and Whitman. Our first contribution to defense is to believe in ourselves and what we are doing. We are always climbing down—in times of peace to the business man, and in times of war to the soldier. But ours, in war or peace, is the great job.

Ours is a hundred year crop. The teaching that will win this war, if we have to fight, has already been done. In my judgment, it has been well done. The teaching that needs now to be done is aimed, if we know what we are doing, at the postwar period.

It is trite but true to say that we live amid a breaking up of patterns on a bewildering scale. It makes a great deal of difference for the next hundred, possibly for the next thousand, years ahead how these fluid patterns "jell." To settle that question, we have, basically, two instrumentalities: war and education.

War is an ancient instrument and its capacity for settling anything on a basis upon which it will stay settled is deeply suspected.

Meanwhile, for the first time beginning to provide foundations to supplant or control war is education.

Because of the swift mutations in human affairs, education ceases to be merely a transmitter, passing on yesterday into tomorrow without disturbing the balance of power, and becomes a transformer. The character of its influence may be in one nation to regiment and in another to liberate; what concerns us is that, in whatever character, the power of its influence is greatly magnified.

It is not too much to say that the destiny of man is in some sort the prize of a race between contrasting conceptions of education and that America is preeminently the exemplar of the liberal and the liberating school. What a challenge is this: to be by the force of many converging influences (from which we can take no credit, but only responsibility) the very spearhead of the humanizing agences of the world!

To meet it, our educational program is called upon to contribute as it has never contributed before. I believe that we will accomplish mightily but we shall do it only by an effort comparable with the present drive for defense. We shall need to shake off inertia and to discover and put to work new clarity of purpose, consistency of method and economy of teaching power.

Vision Would Be Helpful

Above everything else, it would help us if we could look right through the surface confusions of our turbulent society and apprehend the fundamental forces which, deep down, are breaking up the patterns of our world; apprehend them; lay hold upon them, and align all that we have and are with them so that we could approach every issue with a sort of cosmic integrity.

The two forces of Science and Democracy must finally be complementary: neither is sufficient or complete without the other, for Science without the humanitarian spirit is without morals, whereas Democracy without Science runs to uninformed sentimentality and starves to death in the midst of its good intentions.

It is precisely the central objective of universal education to set these two into effective working relations with each other and to bring it about that every human affair, in whatever corner of the world, shall be approached with the motive of Democracy implemented with the method of Science.

Peace and Power Politics, 1941

ISAIAH BOWMAN

President, Johns Hopkins University

THIS nation has emphatically expressed its determination to safeguard its own democracy and to help other democracies. This involves conflict, intense and prolonged conflict, whether or not we are at war. We expect victory for us to crown that conflict. We believe that an acceptable world order is based on agreement through reasonable compromise on the principle of fairness to all. We reject the "new order" of Nazi Germany, now the declared enemy of democracies, because German leaders talk about their new order only in terms of death to all other orders.

Who is responsible for a peace that will permit a reasonable new order to be forged? Is it not the victor? If the victor is responsible for the consequences of his victory, the people of the United States are now faced with two urgent questions: (1) how shall we help win victory and (2) what shall we do with victory when we have won it?

Peace Does Not Mean Prosperity

The peoples of the world think that victory will bring peace. They look forward to the birth of prosperity, the child of peace. War, peace, postwar depression, restoration of "normal" economic life, long-continued prosperity, perhaps the banishment of war: this is an evolution conditioned by the hopes, dreams, expectations and limitations of all mankind; it is not the product of one nation's hopes, dreams, efforts and limitations.

Whatever else the future may reveal, there is a danger signal ahead for every interest that the schools of America advocate and defend. As far as speed and costs are concerned we are going about our defensive military preparations and must go about them as if we were already at war.

Now there is but one way of ultimately meeting those costs, of paying for war or preparations for war: it is by lowering the standard of living. It is chiseled out of schools, museums, art galleries, quality and amount of food, clothing, house furnishings, soil preservation, care of the blind and the insane, private and public hospitalization, road repair.

Included in the list is public morale, which sums up the national character-effect of all the others. Even the victor can contrive no way of escape from the levy, for the world is bound together in welfare as in trade. Victor and vanquished share the inescapable costs of war in greater or lesser degree. The whole world pays and payment comes out of an account called "standard of living."

Education is not putting up a special plea when it seeks recognition of its place in American democratic life or when it attempts to ward off excess of payment for war, either potential or actual. It does not claim exemption from effects otherwise universal. It tries only to present the truth about our national character and how it is shaped in order that a forewarned public may more wisely decide how much of the inevitable lowering of standards shall be put upon the schools.

Two opposing philosophies are fighting for public acceptance today as we view the startling triumphs of power politics during the past year and the dangers they present for ourselves. One of these philosophies is fatalistic: things happen because "time's wise threads so weave." The second leaves scope for human directive power in the belief that what all men dream some men will do.

Destiny Can Be Controlled

The first looks upon "fate" as mystery. The second appraises human resources of skill, aptitude, initiative, resolution and courage and claims at least a small sector of human destiny for human control. The first sits back, content to let the Immanent Will work its way. The second believes with F. S. Oliver that "in the greater affairs of life the mind must fling itself forward beyond its data," in confidence and in faith. Possession of this instinct or lack of it is the chief difference, says Oliver, between great and small men, the simple may have it, never the intellectually arrogant.

In the days to come we shall need the second of our two philosophies in growing measure. As danger mounts, costs will mount. If we enter the war, all glory will be wrung out of it as we contemplate the irretrievable losses. If that moment should come the first object is victory. But hard on the heels of victory will come another war, the war upon our internal problems.

In that internal war the first rule should be that whatever the effect upon our standard of living all should go up or down together. No man should go hungry in a land whose excess productive capacity has been an embarrassment to its economic and political managers. We shall not see again, if we are resolute, 85 per cent of the schools of one state closed, the malnutrition of school children in our larger cities rise, the willing-to-work unfed. If we ought to fight together, we must prosper together.

Peace Has Responsibilities, Too

Peace reaches out in two directions. First, it reaches out in the direction of our neighbors for whom we have an inescapable responsibility whether or not they are friends or enemies. And we should now resolve that neither friend nor foe should be given power, after victory, to defile or betray our sacrifices. The second effect of peace should be felt by all of our own people who responded to the call for sacrifice. In the hour of victory their problems will rise again before us, the ancient problems of food, clothing, land, security. To these "identical old questions," to use Lincoln's phrase, we must give our best imagination, courage and resource, for they represent the ultimate conflict and the ultimate victory of our democracy.

I should like to offer a summary of these implications:

1. Feed the hungry. This is social problem No. 1. Whatever its outcome, the European war will be followed by world-wide disorganization and unemployment. The hun-

gry man is a desperate man and he has a right to be desperate if desirable and attainable productive capacity is not employed by his elected leaders. Brains and office combined must accept responsibility for food and work. If we can organize for a possible fight, we can organize to prevent chaos after the fight.

2. Organize draft boards to get men into employment and not merely out of the army. Release men according to an agreed system. Let each community tackle the job of employment for the returned man. In Colonial times, the community took care of the absent militiaman's crops and livestock. Why not now? Our resources are much greater, our statistical and community organizations much further advanced. If defense is to everyone's interest, the defenders are everyone's responsibility.

3. The more armaments we have the poorer we are. Arm, but in so doing remember that, unless we are vigilant, the cost will be taken out of the standard of living inequitably. The more we spend now the more surely we must settle postwar problems by controlled production and consumption. The alternative is an unbearably low standard of living and an impoverished cultural life.

4. Natural wealth is for "the general good." No man made the soils or the petroleum deposits. Thoroughgoing control of the national unearned wealth is imperative. The simple realities of the common people are "bread, coal, clothing, meat, houses and land." These have to be supplied by "natural resources" developed by skill and for agreed social purposes, in 1941 as in 1620.

National Health Is Strength

5. If we have not improved the people of the United States we have not improved the United States. Life is dynamic and attempts to realize possibilities put in its way by expanding science. We should apply the beneficences we discover. National health is national strength.

6. Culture is a state of mind as well as a collection of objects. It is fostered by fair adjustments of social rights and duties while giving talented persons a chance to rise. Culture is created by the few but it is paid for by the many and the many should by training possess it. Laws become culture when every man thinks of himself as "the author of the law which he obeys." If there is ever to be a new holiday, make it the day after election when we accept the decision of the majority and agree to go forward peaceably under the law. Short of excess and waste taxes are culture, for they buy security and civilization.

7. Democracy imposes upon the individual the duty of discipline. It demands that each man identify his special responsibility and discharge. Our devotion to our own kind of democracy gives us no warrant for defining another people's democracy. There is no known democracy fit for those who do not want it or are too egotistical, withdrawn and selfish to defend it. Democracy is individual good subordinated to the general good; it is equal opportunity but not equal achievement and, therefore, not equal reward.

Be Bold but Not Bombastic

8. Keep our foreign policy abreast of our striking power, not beyond it. A bold attitude is admirable but a bombastic one is ludicrous and dangerous.

9. Force is our first instrument of defense. As the example of Britain demonstrates, when the crucial moment of defense comes we must fight our ships, not merely admire their fire power. Our attention should be on movable fighting ships, not on a stationary Pearl Harbor or an immovable Panama Canal. A two ocean navy means a five fleet navy, each assigned to a definite area of patrol in (1) Alaska; (2) Hawaii; (3) Panama Canal, with a sector in the Pacific and a sector in the inner Caribbean; (4) West Indies, or outer Caribbean; (5) Atlantic coast, including advanced air and fleet bases.

10. There is as yet no least proof of final German victory. An overextended conquest is inherently weak. As long as, and to the extent that, we vigorously support the foes of Germany we give ourselves time to arm (an industrial job) and to train (an army job). Ultimate negotiation with Germany will be effective in proportion to our naval, military and air strength, both realized and potential. Those who wish to withdraw aid to Britain because they believe that her defeat will mean the end of the military war forget that the peace negotiations to follow will be the opening of an economic war. Either victory or defeat for Britain means that there will be thrust upon us the chief responsibility for participation in an after-war world order. If we shirk that responsibility the frontiers of the implacable enemies of our way of life and our political system will be inside our ring of island defenses, not outside it.

11. The schools have an indispensable part to play while these supernational forces run their course:

a. To do their professional teaching and training thoroughly and well, remembering that a large measure of the stability of America is due to the equality and universality of our schools, the opportunities they open up and the hope they afford.

b. To help maintain the unity and morale of the country by teaching what America is, looks like and can be, if we but keep and develop the democratic principle as opposed to dictatorship.

c. To broaden the education of students to include a knowledge of current life and death problems, the thought of the past woven into the emerging questions of the present, the individual never losing sight of the common good.

Prepare for a New Order

d. To experiment with and revise curriculums in order that students will be prepared for (1) participation in an economic order that must apparently suffer further wide and deep changes and (2) new community organizations that will be necessary to keep soldiers, industrial workers, farmers and others in fair collaboration.

12. Schools are a part of society and have the right and the obligation to criticize and analyze current concepts of American purpose and duty. They should go deeper and be more stable than the prevailing sentiments and enthusiasms of the public. They teach the sons and daughters of the folk who produce with their hands in shop and field, as well as those who employ chiefly their heads as in a profession. It was ideas that made America, for while "action" is transient in form and often in effect, ideas are permanent. America can be as permanent as its ideas only if it stands up for them boldly and intelligently.

No Moratorium on Education

To Cut Costs Now Is Folly

JOHN K. NORTON
Teachers College, Columbia University

THE career of school finance during the last two decades has indeed been a checkered one. In every period there have been those who have solemnly told us, for reasons that they considered good, that school expenditures must be cut.

In the booming 1920s we were told that school costs must be lowered in order that sufficient money might be available for investment in productive industry. The stupidity of this proposal became evident in 1929. In that year a first-rate depression set in.

One of the primary causes of that depression was an oversupply, rather than an undersupply, of unused funds available for investment. These funds had been used to inflate stock values far above their real worth. For each dollar going into legitimate investment channels another had been used to bid up the prices of stocks higher and higher until the whole absurd process crashed under its own weight.

Opportunists Attack Schools

It was then necessary to find new reasons on which to advocate cuts in school costs. The crisis of the 1930s provided several satisfactions to those interested in slashing school expenditures. We were told that too many children were in school for too long a period. They were being offered an extravagant curriculum which should be cut down to the three Rs at the elementary level. Vocational education was declared unnecessary since there were few jobs available and, besides, modern mechanized industry required little or no vocational education. Aided by depression conditions and a defeatist psychology, attacks on the schools along these lines achieved partial success. In some school districts the curriculum was cut to a nineteenth century pattern, evening schools were closed and vocational education was restricted.

The fallacy of such policies is now evident. Hundreds of thousands of young men and women were eliminated from school. They could find no jobs. As many as 4,000,000 youths at one time were neither in school nor employed. Many of them took to the open road and some threatened to do worse. Something had to be done. The C.C.C. was one of the remedies, at an annual cost approaching $1000 per enrollee. In spite of this and other efforts of the federal government to meet the situation, the investigations of the American Youth Commission recently revealed that less than one in four youths leaving school has received any significant vocational guidance, education for work or aid in finding a job.

What is the current result of economizing on the education of millions of youths during the 1930s? To repair the shortage of workers for defense industries the federal government is frantically appropriating tens of millions to provide for the quick and, in some cases, superficial training of an adequate supply of technically trained employes. We are being told that perhaps the most serious bottleneck that threatens to develop during the current crisis is a shortage of skilled workers. This is one of the outcomes of the demands of the economy leaguers for reduced expenditures for education during the 1930s.

A New Reason Is Advanced

And now as we enter the 1940s, a new reason is being discovered for slashing educational expenditures. That reason is patriotism. We are told that costs must be cut in order that defense expenditures may be increased.

Let us examine the situation that promises to exist in the years ahead. Let us look at it mainly from an economic point of view and ask this question: Are those who advocate reducing educational opportunity during the 1940s genuine patriots or merely muddleheaded patrioteers?

The first fact that emerges from an intelligent analysis of the contemporary scene is that growing numbers of highly trained workers are being demanded by peacetime, as well as by wartime, occupations.

Warfare no longer consists mainly of maneuvering millions of unskilled automatons, who ask merely that their bellies be filled to win battles. Rather, warfare has become the clash of highly trained technicians. Military matériel of the most complex character must be used with infinite precision. Coordination of forces on land, in the air and on the sea must be achieved. For every trained soldier actually engaged in combat, there must be a dozen or more expert workers behind the front, designing, constructing and operating the machines and assembly lines which spell the difference between victory and defeat.

Warfare Involves Civilians

It is not enough that those engaged in combat or in war industries shall be trained. Warfare today is no longer an affair of small professional armies fighting far from the centers of population. Rather, it involves the mortal conflict of whole peoples. Millions must be qualified to act precisely and skillfully whether they are doctors who minister to wounded civilians; workmen who repair power lines, water conduits or railroad trackage, or citizens who extinguish incendiary bombs.

He who runs may read that the unskilled worker is a liability in modern warfare. A fact that is not so easily discerned is that the unskilled worker is also a liability in peacetime economy. Each of the recent federal censuses has revealed a growth in number and percentage of workers in professions and in other vocations that call for extended occupational education. The unskilled categories of labor show an opposite trend.

This should not be surprising. The industrial revolution as a whole may

be epitomized by stating that it is a process whereby more and more trained workers, using increasingly expert methods of labor and instruments of production, produce more and more goods and services both in quantity and in scope. As a result of this process, per capita production has increased sevenfold in a century in those countries that have progressed farthest in the industrial revolution. It may be concluded, therefore, that the price of military preparedness as well as of general economic efficiency is the maintenance of an adequate and ever growing percentage of professionally and technically trained workers.

But it will be objected that the mechanization of industry both in peace and war involves increasing use of automatic machines requiring a minimum of actual vocational skill for their operation. This is true but it is not the whole story.

The percentage of workers employed in manufacturing and mechanical industries is a minor and decreasing fraction of all workers. On the other hand, the professions or clerical occupations and similar callings that cannot be adequately trained for in six weeks or six months represent an increasing percentage of the gainfully employed. Also, for every automatic machine there must be highly skilled workers who design the machine, who produce it, who keep it operating and who redesign it to start the process all over again when it becomes obsolete.

A second major conclusion emerges from an analysis of the current situation. It is that we shall be exceedingly unwise if we plan our current educational program solely with the demands of the immediate military crisis in mind, critical though that may be. This conclusion derives from a series of considerations.

To begin with, it seems highly probable that the post-war period will be one of exceedingly difficult economic adjustment. It will involve transfer of large numbers of workers from preparedness industries, in which they have been receiving high wages, to jobs concerned with peacetime production. It cannot be expected that this transition will be made easily if, during the 1940s, we feed many young people into the war industries who at best possess limited and narrow vocational preparation. Rather, insofar as is possible, we should see that all young people today are given as broad a vocational training as their capacity and diligence permit. This is the best insurance they can carry against disaster after the war is over. They will, indeed, be a lost generation if they enter this post-war period with no vocational asset except that gained on the job in a munitions factory.

Perhaps of greater importance is another consideration. The post-war period of economic readjustment will present us with what are, perhaps, the most difficult economic problems with which our nation has ever had to deal. Just what they will be cannot be predicted. But it is certain that they cannot be dealt with successfully by a citizenry that does not possess a high degree of economic intelligence. Accordingly, general education to develop economic insight and understanding should be emphasized in the years just ahead.

We should not forget that the problems of unemployment, productivity below capacity and other major economic ills have not been solved. Their solution has only been postponed by the industrial activity resulting from our preparedness effort. It would be ironical, indeed, to win a military victory over totalitarianism only to succumb to such post-war domestic menaces.

One final fact needs to be emphasized. This is that the returns from economic education as well as from other types are exceedingly perishable. It takes but a generation to lapse from economic competency to economic ignorance. We have no way of knowing how long the current crisis will last. We hope it will continue only a few years. But it might last for decades. Such things have happened before in history. Therefore, it is folly of the grossest kind to adopt a policy of postponing education for the period of the emergency.

Those who would declare a moratorium on education in the current crisis lack understanding of what makes a nation economically powerful. They would cut one of the taproots of economic strength in a world in which economic power is of paramount importance whether one is considering preparation for national defense or general economic well-being during and following the war period.

Seen in an Atlantic City School

Convention goers who took time off from the regular sessions to visit Atlantic City schools were rewarded by seeing modern instructional methods being applied. Above is the editorial staff of the Shore Line, the elementary school magazine at the New Jersey Avenue School, at work on an issue.

Seven Desirable Goals

for Rural School Systems

IVAN A. BOOKER

Assistant Director, Research Division, N.E.A.

Although there has been widespread improvement in rural school programs since 1930, there are still thousands of schools in which instruction is traditional and not practical

THE measuring stick that must be applied to recent trends in rural education is calibrated with the goals that we set. The distance we have moved toward a satisfactory rural program must be judged in terms of how far we propose to go. What, then, do we want by way of rural schools? And, what have we been doing in recent years to provide them? As a point of departure it is suggested here that:

First, we want a system of rural education that reaches all rural boys and girls of school age. Between 1930 and 1940 rural high school enrollments have increased from 1,500,000 to 2,500,000. Elementary schools, too, have been made more accessible, particularly as a result of better roads and improved transportation facilities. These gains leave something to be achieved, however, for more than 2,000,000 rural youths of high school age are not attending school.

Second, we want rural pupils to attend school as regularly and for about the same number of days each year as if they lived in the city. During the last ten years greater regularity of attendance has been achieved in about one third of the nation's communities and somewhat longer school terms in 18 per cent of them. For these gains we can be thankful but toward them we can scarcely be complacent when we recall (1) that the average rural school term is eighteen days shorter than that for city schools and (2) that the average rural pupil attends school twenty-four fewer days per year than city children.

Third, we want an instructional program in rural schools which represents the best that has been developed in educational theory and practice. According to reports from 1000 rural superintendents, improvements in instruction have exceeded by all odds the progress made in any other phase of rural education during the decade immediately past. They have been accomplished through (1) curriculum revision; (2) shift from textbook recitation procedures to the provision of appropriate learning experiences; (3) subordination of subject matter distinctions and rigid grade level lines; (4) better provision for the needs of individual pupils; (5) use of a wider variety of teaching materials; (6) longer class periods and more flexible teaching programs; (7) class projects definitely and immediately related to the experiences and problems of pupils in their own respective communities, and (8) provision of suitable extra-curricular activities.

Fourth, it is here proposed that we want a well-qualified, competent teacher in every rural classroom. A decade ago the average rural teacher had only about a year of professional education; now, in four counties of every five, the average preparation is two years or more. Certification standards have been raised in no fewer than 14 states, most of them predominantly rural. Schools in the education of rural teachers have greatly improved their offerings, particularly through the introduction of differentiated curriculums and specialized courses. This commendable progress, however, leaves the education of rural teachers below an acceptable level.

Fifth, we want every rural pupil housed in a school building that is safe, comfortable, clean and attractive. Stimulated and aided by various federal and state grants, thousands of rural districts during the last ten years have replaced, remodeled, repaired or otherwise improved their rural school buildings. Not the least of the improvements made are those pertaining to better heating, lighting and sanitary facilities. Strengthening of buildings against earthquake hazards, the construction of cyclone cellars and provision of space and facilities for serving warm lunches are other forms of improvements.

The problem at hand is to see that this building program continues, that it is not forgotten in the stampede for battleships, tanks and planes. Without continued federal and state assistance, relatively little rural school construction is likely.

The sixth goal here proposed is sufficient and suitable equipment in every rural school so that good teaching is reasonably possible. Some improvement is reported in this area since 1930, especially better rural school libraries and more adequate instructional materials and supplies. Yet the need is urgent in a large percentage of rural schools for further improvement with respect to library and other instructional materials and for seating equipment, blackboards, playground equipment and heating and lighting facilities.

Finally, we want professionally competent educational leadership in every county, town, parish, union and other similar rural district. The average amount of professional preparation for rural superintendents, in common with that for teachers, has increased materially during the last ten years.

Before the rural superintendency can attain the status it so fully merits, however, several steps seem imperative: (1) discontinuance of election by popular vote; (2) establishment of satisfactory minimum qualifications for rural superintendents; (3) extension of the functions and duties pertaining to the office; (4) salaries commensurate with the service expected; (5) sufficient professional and clerical assistance, and (6) stimulating, constructive help from state departments of education and teachers' colleges.

Evolution of an Activity Program

O. E. HARRINGTON

Superintendent, W. K. Kellogg Consolidated Agricultural School, Augusta, Mich.

ALTHOUGH a formal program never had been followed in the W. K. Kellogg Consolidated Agricultural School, Augusta, Mich., eight years ago the methods and curriculum began to be liberalized with the view to arriving finally at a completely organized activity program throughout the elementary school.

In viewing the situation at the start a number of factors seemed to be fundamental to our program.

1. The teachers had not been trained for an informal program.
2. The school program could not proceed faster than the parents of the children could go in their thinking.
3. A greater quantity and variety of teaching materials were needed.
4. There was fixed furniture in two rooms, thus handicapping an activity program.
5. The best features of the formal type of curriculum needed to be retained in the progressive curriculum.
6. A scheme of continuous evaluation needed to be devised to check the values derived from new procedures.

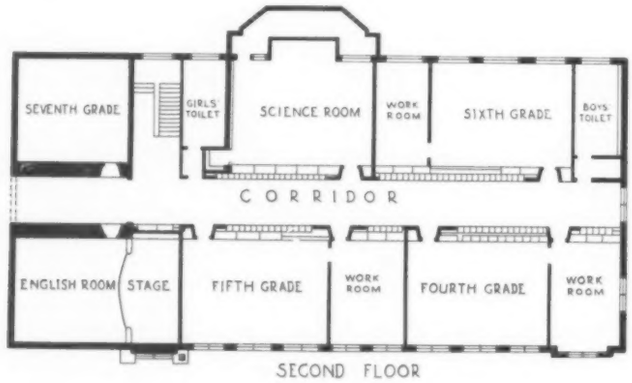
The first problem, then, resolved itself into making the teachers sympathetic to the new program, for they could, by intelligent and serious effort, fit themselves for it as rapidly as the pupils and the community were ready to adopt it. A general plan was worked out for preparing the staff for the new work. All the teachers were favorable to the undertaking and willing to make further preparation for it. This was accomplished by reading, staff meetings, visitations, extension courses and summer work.

Whenever it became necessary to replace a teacher, effort was made to obtain a person qualified for an activity type of teaching program. We did not find many teachers already trained. Therefore, we looked for candidates who could adjust to new and nontraditional situations; who had a rich background of experience; who were keen, alert, resourceful and more interested in pupil growth than in subject matter mastery; who were willing to learn, and who did not become alarmed if they could not answer all the questions that arise in a live activity program.

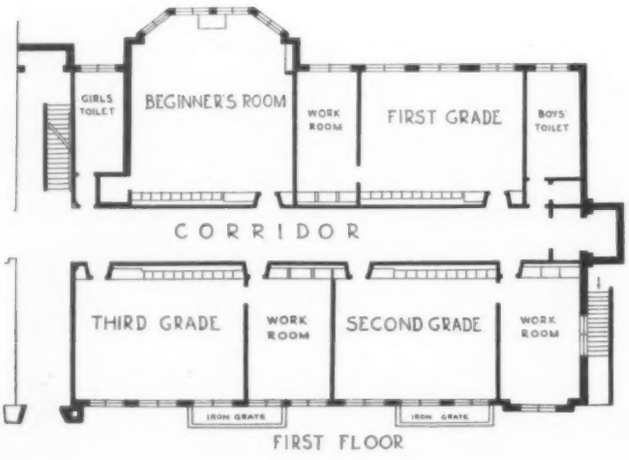
Whenever we wished to make an important change in the curriculum, months were spent in explaining to the patrons the new methods and the values to be derived from them. This was accomplished through the school paper, which goes into every home in the district each month. Teachers also assisted in this work through personal interviews and discussions.

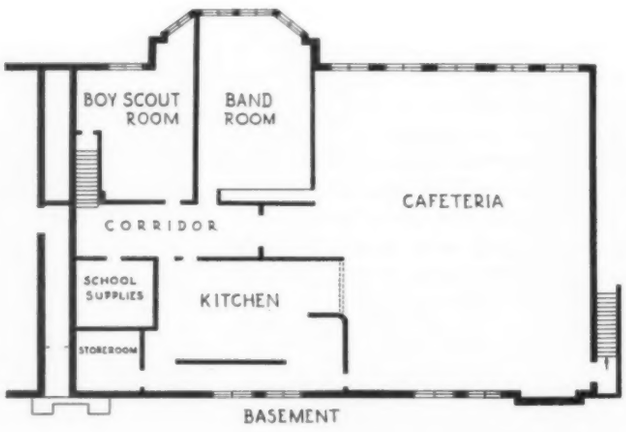
In adopting the activity type of program a greater variety of educational materials is needed than in the traditional program. One of our great problems was to keep on hand a supply of source materials for alert classes.

At first the teachers who were obliged to work in the rooms with the fixed furniture believed that they would not be able to pursue the new type of curriculum because of the inflexibility of the seating arrangement. In spite of this disadvantage, however, these teachers accomplished their objectives. A few of the seats at the front of the rooms were removed but even then comparatively little room was provided. Yet all available space was utilized; pupils were allowed to move about and to



The accompanying floor plans are those of the new addition to the elementary school plant built to house the activity program. Opposite Page, Lower Left: Front elevation, Kellogg School.





use the tops of desks and groups of desks for work and study materials. Work frequently was taken into the gymnasium in which ample floor space was available. Groups of pupils working there were always without the supervision of a teacher but the interest of the pupils in the work they were doing took care of disciplinary problems.

In our determination to retain the better elements of the traditional program we have developed a curriculum in which the activity is the nucleus for the major part of the work done by every group. By developing habits of research and by following lines of interest into all fields of knowledge as far as the level of achievement and ability of the pupils will allow, we are finding little difficulty in maintaining a satisfactory breadth of interest and effort. Whenever common skills of any type are called into use by the general activity and it seems that they are not being developed enough by incidental uses, special drill is provided.

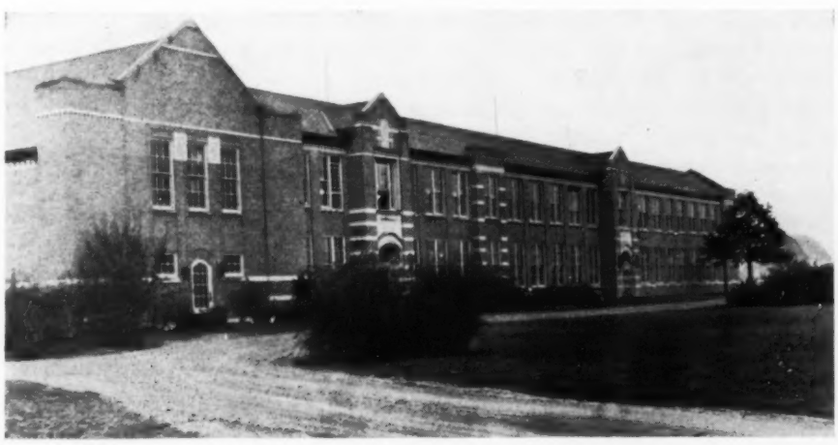
It is comparatively easy to evaluate academic achievement and to measure the results of a traditional academic curriculum. However, there are many values incidental to the informal program that are not measureable objectively. At present we are keeping a general record of change in social attitudes, of ability to take part in cooperative undertakings, of ability to plan, organize and carry out plans without too much direction, and a frequent measure of fundamental skills of learning.

In the elementary addition there is a workroom adjoining each classroom, separated by a heavy plate glass partition; it is about half the size of the classroom. Above: First grade workroom. Upper Right: Sixth grade workroom. Right: High school panel.

We have been pleased with the values that have resulted from the program. Children are learning to read more rapidly and the variety of their interests is expanding. As we have an opportunity to compare the growth of the whole child socially, intellectually and spiritually with that of other children in schools having a formal program, we are able to see what increased and unrepressed opportunities for growth do for boys and girls.

The results have been so satisfactory that last year we built an addition to the school plant to house the elementary division. There is a well-equipped workroom with each elementary classroom, separated by a heavy plate glass partition. This room is about one half the size of the classroom proper and provides space for construction and for the display of finished products; it prevents the noise from disturbing those who are doing other things. Each classroom is equipped with movable chairs and two-pupil tables.

We are now carrying this philosophy and program into our upper grades. The older elementary rooms were remodeled to suit the changing needs of high school pupils and our high school program is being gradually reshaped and liberalized.



Chalk Dust

SEVENTY-FIVE shopping days before commencement. After the first of March the well-filled stocks of commencement speakers, with their glowing assortment of nostrums for the ills of the world, will rapidly be depleted by alert shoppers. Later in the year about the only models left are shopworn and outmoded. The wise school administrator will make early reservation for his commencement speaker.

Because of conditions over which the school has no control, speakers may come higher this year than usual. The more esoteric platform philosophers have been hard put to it to explain what the world is coming to and the sounders of notes of cheer have had to work overtime in order to collect material.

Seventy-five shopping days before commencement. Every day busier than the one before. Better get the speaker signed up and the auditorium curtains repaired. It is later than you think.

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WHENEVER education seems to be getting more than its fair share of grief and criticism, when the ancient and honorable fraternity of taxpayers growls at expenditures, when parents protest that they are not going to stand for any more foolishness thought up by state departments of education, my thoughts hark back to Supt. John Jones.

John Jones is a real person and that is his real name. He is retired now and lives in a little town in southern New York State. But, for more years than I know, John was district superintendent down in Allegheny County near the Pennsylvania line.

The school patrons there were hard bitten, conservative farmers. The miles down in Allegheny were a lot longer than they are now and John never saw a school bus. He supervised a tremendous territory of small schools in which the cost of maintaining educational facilities in terms of actual sacrifice was much heavier than in these later days of centralization.

At the annual school meetings that John attended, grave and world-shaking problems were settled: whether to buy a new map when the present one was only twenty years old and still boundable; whether to get 20 new fangled drinking cups to replace the old tin dipper. The school patrons would sometimes sound off about increased costs and fads and frills.

To them, John had one simple and effective speech. He would say: "Now you folks are not mandated to spend this money by any state department a long ways from here nor do the people down in Olean care a hang whether you fix things up or not. These schools are your schools, built by your own fathers who sleep on the hillside and who died that democracy might continue to live; and by their fathers who wrote a constitution placing education first on the list of things to be; and by *their* fathers who left their homes in an older civilization to set up an equal chance for all men. Those are the folks that are telling you how to vote and why.

"Yes sir," John would say in that quiet way of his, "let's keep on putting first things first."

And because the American people, then and now, have a way of putting first things first, John Jones has lived to see his one room schools give way to greater visions and to realize that education has become a living force in the American way.

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Medical Notes

SEVERAL occupational diseases that flourish toward the dead end of winter the wise teacher will do well to avoid. They are highly communicable.

Watch for *Pedogogus worryitus*. This nasty germ is found in its most virulent form in the rural sections about the time the school board gets ready to send out the contracts. The annual meeting of the board for passing judgment on the amusements, morals, manners and physical attributes of its employes is when "worryitus" disease reaches its highest incidence.

Schoolma'am irritans is the cause of another pre-spring affliction. Symptoms include a rasp in the throat, eyes that rhumba and hands that are afflicted with an overpowering desire to pull hair. Unfortunately, the superintendent is bald and Sammy must act as substitute.

The remedy for both diseases is to give yourself a few giggles, a new hair-do and an Easter bonnet. The seizures will pass with the coming of Spring Fever.

Our Freedom Is a School Job

EVERETT R. CLINCHY
President, National Conference of Christians and Jews

AMERICANS may lose their liberties.

This republic faces danger of disintegration from within. This is not a remote peril. It is a disease that has been epidemic for several years in the free countries throughout the world. This disease already has hospitalized many independent countries and their freedom is now under the protective treatment of that great physician of human liberties, Doctor Goebbels.

Disintegration from within is a national sickness, the symptoms of which are two: (1) low blood pressure with regard to the responsibilities that go with freedom in a democracy and (2) dangerously rising temperature in intergroup tensions. Each symptom is a sign of ailment which, if neglected, will surely bring death to liberty.

It is with regard to this, the danger of losing liberty because of enervation of national spirit and disintegration of intergroup unity, that professional educators can act. Schools are fitted to diagnose diseases in the body politic and to provide cures for them.

Let us deal first with the symptom of enervation in patriotism. American patriotism is a love of country so great that a citizen accepts the duties that go with the blessings of liberty. Duties change with new occasions. To discover what the insistent duties today are, one should scrutinize the signs of decay which yesterday brought revolutions to Europe. We shall list eight duties which, it seems to us, should be direct objectives or indirect by-products of education, if our free society is to survive our times.

1. Dramatize spiritual values in which youths can believe and for which they will sacrifice. A social order not undergirded by the people's religious convictions will be overthrown by rebels with other convictions. Nothing less than an American Dream with difficult ideals, demanding hard work and great sacrifices, will attract youths today.

2. Apply democratic processes to the whole range of human relations. Young people must be given hope for the future and a sense of having a part in a cause. These are the promises that made the revolutionary youth movements so alluring abroad. America can beat the radicals by offering our youths participation in planning and working out the future they are asked to build.

Above: Cleveland school children performing a Bohemian dance. Cultural differences that exist in America make a varied, rich and colorful society.

3. Distribute fairly the buying power among all the people. When the range between the poor and the rich becomes too great, the social ties snap. The secret of strength of the revolutions is that the masses are made to feel that they "belong," that everybody has a stake in the success of the commonweal.

4. Arraign dishonesty wherever found. Corruption undermines every political state in which it is tolerated. Youths can understand that only everlasting vigilance will keep city, state and federal government clean. Youths will reject the myth that totalitarian government is an answer to this human problem when they see that corruption in Communism, Fascism and Nazism eats away faster because no criticism or no investigation by the people is allowed.

5. Restrain overindulgence in food and drink; discipline soft and wasteful living. Like a team in training for a hard season, the revolutionary youths snapped out of excesses, easy and lenient living. And youths like serious responsibilities, great challenges.

6. Correct false notions of racial superiority. Racist theories without any scientific evidence whatsoever are perverting nationalism in Europe into a primitive tribalism. The truth about racial strains that scientists consider most probable is that there are no group characteristics of behavior which are fixed by "racial" or other biological origin.

7. Think with students about postwar aims. Youths want to know about jobs and chances to get married, build a home and raise a family. Are men condemned to remain on the economic level on which they were born? Can poverty be tackled

as scientifically as disease? If a man works, may he also dream about music and the stars? Revolutions make their goals both practical and aspiring. Democracy must do no less; indeed, it must produce a better society than revolutions promise.

8. Prepare the minds of youths for federation of the free peoples of the earth. Yesterday nations built their walls, thought they could live alone. Today every revolution talks of overrunning the world. If tomorrow belongs to democracy, then nothing less than a democratic government on a world scale, of free people, by free people and for free people, will be an idea big enough to command youths.

There is another aspect of patriotism to which schools may contribute. This is enlightenment regarding this republic's tested traditions, standards and practices. A wealth of information on this subject is provided by the Office of Education, the various commissions of the American Council on Education, the National Education Association and school administrators and teachers all over the country. A reawakened interest in democracy is issuing in the careful exercise of democratic processes in educational situations. Accompanying this is school participation in community problems that face our democracy.

Hate Is a Tool of Nazism

The second symptom of breakdown in a society blessed with liberty is bad feeling among culture groups. Schools should accept the duty to immunize youths against hate. The whole thesis of hate, whether directed against economic group, political party, nationality, racial strain or religious society, is devastating to liberty. Hate, along with terrorization and violence, has become a tool of Nazism to undermine the free countries. "Divide and conquer" is its logic.

The propaganda technic proposed for the destruction of this republic is simple. American citizens came to this land from 47 Old World countries; in this, then, one nation of many nationalities, the trick is to sow seeds of mistrust, contempt and hate among them. Moreover, the United States is a people whose sons and daughters originated from among all the racial strains constituting the one human family; among them are those who are loyal to each of the main living religions. The design is to pit Negroes against Whites, Christians against Jews, Protestants against Catholics, workers against employers.

Hate, the Nazi propagandists believe, will lead on to the fourfold formula for blackjacking a free people, "contradiction, confusion, indecision, panic."

The primary project in this subversive process is anti-Semitism. The Nazis have made anti-Semitism no longer a Jewish but an American problem. This is why: it is the first step in terminating liberty for the Christians; next would go liberty for the schools, for business, for labor, for every institution and person in this republic.

Next Threat to Catholics

The crowd that instigates hate of Jews today tomorrow will crack down on Catholics; a year from now, on Protestants. It was done in Germany. Approximately one million are in concentration camps in Nazi-dictated territory; 100,000 are Jews, 900,000 are Catholics and Protestants. In Holland the Nazis crushed the Jews as soon as they overran the country; six months later they started to round up Catholics and openly threatened that the Protestants would be next.

Jews are attacked first because they are the most vulnerable minority. The ultimate objective of anti-Semitism is to annihilate the values and ideals in the Judaeo-Christian tradition. Anti-Semites are out to destroy Judaism because Christianity is based upon it. The ideas and reverences which total dictatorship seeks to suppress are the essentials not only of Christian civilization but also of American education.

Here is the list: the dignity of personality; freedom of thought and of worship; the sovereignty of conscience; the right to be different; the characteristic ethics of the Western world. The destroyers of good fellowship among the nationality, racial, religious and economic groups in America are attempting a blitzkrieg against the American way of life and anti-Semitism is merely a smoke screen to cover an attack upon the home, the church and the school.

In other lands tyrannical governments are attempting totally to control and to make totally uniform every aspect of culture. Here in America, not so. We have discovered that it is interesting to live in the United States precisely because of its differences, national, cultural and racial. Cultural differences in mood, in taste and in temper do persist in America and make a varied, rich and colorful society.

Further than that, we believe that in our differences lies our strength. "Diversity," says Prof. Arthur H. Compton, "is nature's way of ensuring life and strength." Of these various cultures that compose our commonwealth each brings some element of vigor to the common store. Moreover, the existence of variety keeps our people versatile, pliable, adaptable and resourceful. Cultural diversity provides survival value.

One question schools must answer: How can we produce a generation of youngsters in each culture free from both a psychology of inferiority and one of superiority?

Louis Adamic tells a story of an old farmer in the Middle West, a Norwegian, who through fifty years of residence in this country, had attempted to keep alive the best of the culture that he had brought with him from his home.

No Longer Ashamed of Origin

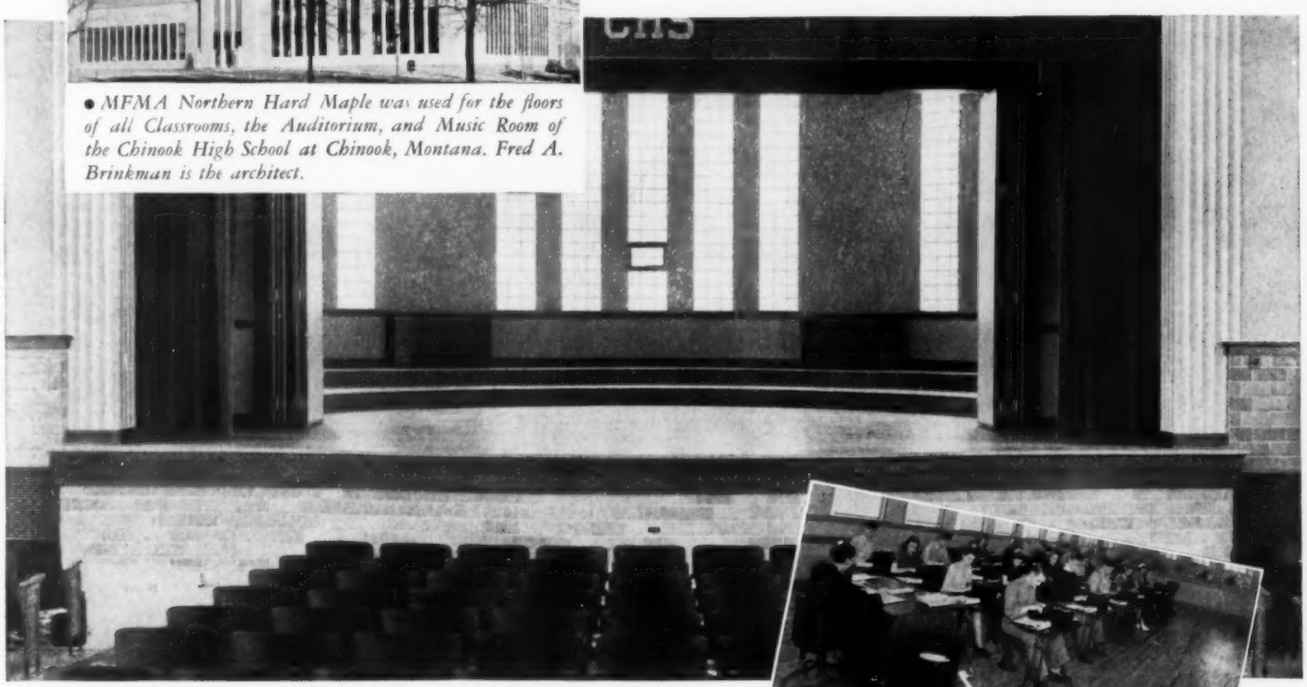
The farmer told Mr. Adamic: "For many years our children were ashamed of us, because we were different; we were not fully American, as the Yankee stock was. We had no communication with our children. 'Ma, what you got to eat?' That was all they asked when they came to see us, all they asked and meant. Now there is something new in their feeling. They say, 'You come from Norway. Where?' We get out the old atlas and show them. Then we talk of our memories and they are interested. They want to know. It is not that they are less American but they are not ashamed of what we were. They talk to us and are nice to us. They are so nice to us that sometimes when we are alone, my wife and I, we cry."

American youths of every nationality background will soon slough off annoying traits of inferiority complexes and superiority shams, when respect and understanding from outsiders are shown toward their memories and people and traditions.

"Because of
NATURAL BEAUTY, WEAR RESISTANCE AND EASY MAINTENANCE...
Northern Hard Maple SPECIFIED"

says FRED A. BRINKMAN, A.I.A.
Kalispell, Montana

• *MFMA Northern Hard Maple was used for the floors of all Classrooms, the Auditorium, and Music Room of the Chinook High School at Chinook, Montana. Fred A. Brinkman is the architect.*



The stage in the Auditorium, combined with Music Room in back. Hard Maple floored.

• *It's easy to keep Hard Maple clean and pleasing, for properly finished, brushing alone cleans it.*

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Skill in Straight Thinking

GEORGE D. STODDARD

Dean, Graduate College, University of Iowa

NEVER before in the world's history have security and happiness been so closely related to straight thinking. Other nations in other times have faced equally bitter choices but their mass populations were characterized by ignorance, illiteracy and superstition. Now the same tools of thought, the same mechanisms of motivation and social contact that have lifted populations out of these depths are applied in ways that are destructive and pathologic.

It is frequently held that our chief weapon against oppression and intolerance is the free public school. Hence, it may be helpful to enter the school, opening the door of the child's mind, as it were, to discover what is taking place.

In school, children at all ages are expected to believe what they are told. For a long time they believe implicitly, especially if the telling comes from persons in authority; for a long time they believe what they hear over the radio or see in the movies or get in classroom or textbook. The schoolroom situation is so contrived as to lend validity to whatever is being taught; under these conditions utter nonsense could take on a flavor of reality and meaningfulness.

Children Have Insight

Many pupils already have been conditioned to a thoughtless acceptance of "facts" by well-meaning but dictatorial parents; they have been taught to obey and no questions asked. Yet, long before adults bother to enlighten him, a child is ready to develop insights, to sense cause and effect relationships to see a "reason" for good behavior.

In order to improve children's habits of thinking we must steer a difficult course. If we overdo motivation by exploiting a child's suggestibility we shall expose him to the devastating forces of propaganda, error and dogmatism. Children simply must not believe everything they hear, see or read, not in the 1940s. If, on the other hand, we knock them so hard as to produce a big bump of rejection and cynicism, we shall be dismayed at their resistance to common knowledge, to relationships that have been found true and good in science and social affairs.

The question is, how can we as school people guide children along the road of straight thinking, keeping the way broad enough to accommodate at once pupils who are dull, average and bright?

As a solid beginning, let us encourage children to ask questions, genuine questions, not stereotyped forms. A good question leads rarely to affirmation or negation but to a search for the underlying facts, events and relationships. It is an invitation to a kind of pre-research, to discovery, to the weighing of evidence. For the child, it is the beginning of an objective and scientific method that need never be displaced.

They Can Learn Objective Thought

This habit can be developed in the elementary grades. For instance, in testing the validity of reports on world events, it may be helpful for the teacher to place on the bulletin board or to have read in class the actual teletype dispatches, let us say, from Washington, D. C. Often these dispatches will be the total information available to a newspaper. By checking the headlines, articles, interpretations and editorial comments of four or five newspapers that have received the same information, a ten-year-old child can begin to see what happens: news is one thing to the *New York Times* and another thing to the *Chicago Tribune*.

To think straight is not only to have mental ability but to direct it logically toward the solution of problems that have been well formulated. Recent studies in semantics indicate that straight thinking is impossible when the terms to be employed as intellectual counters have not been agreed upon, or when the problem itself is not clear. To think at all is to deal in abstractions, to work within a logical system.

Given a chance, this is a lesson that the child can learn. It comes about by mastery at a level of difficulty that in the beginning is low. He should not be asked to move up to another level of understanding until the simpler relations are well in hand. This means in arithmetic, for example, that there should be diagnostic testing of a type that probes his understanding of generalizations. He must know that two and three are five, and not exclusively that two apples and three apples are five apples.

Some arithmetic tests now used in the New York City schools involve a type of transfer and generalization far beyond rote learning. The pupil is called upon to select and he must show some enterprise in setting up the problem in the first place. This is a helpful step toward clear thinking.

Even in the first grade, children are capable of getting a good grasp of the concept of median, considered both as mathematics and as graphics, and I have seen frequency polygons neatly drawn and apparently understood by feeble-minded boys interested in the milk production of cows assigned to their care.

Abstractions From Experience

Abstraction is not the sense experience itself; it is rather the ideas that spring from these experiences. The way to get children to think about a farm is to go to a farm, living there if possible, so that the children have contact with objects, activities, sights, smells and sounds. Later, these experiences combine into a rich fabric that is both sensory and symbolic. It has become the stuff of true knowledge, of thinking, of relating, of interpreting; it is conducive to straight thinking.

Since time is short for everybody children cannot always be given direct experience. There are legitimate substitutes. Some of the farm life can be brought into a classroom or into the neighborhood and some of the realities of store, bank, post office, airport or steamship can be introduced to the eager senses of the

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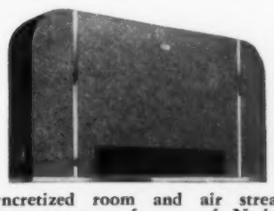

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child. I am suggesting not a return to literalism but a better employment of it in the service of attitudes and abstractions.

There is no simple procedure that will ensure straight thinking on the part of either children or adults. If it were simple, it would be more common. Nor have I discussed maladjustments of personality that tend to push a child away from sound mental activity. Reasoning is avoided when it leads to unpleasant results. At the extremes, as in psychopathy, a person will suffer discomfort and misfortune rather than relinquish cherished illusions; when his beliefs or actions are so bad as to constitute an attack upon the welfare of others, he is led gently to a mental hospital. There efforts are made to bring him back to normality, that is, to a plane of logic and behavior that can be considered safe and acceptable.

Straight thinking, in short, is not something inevitably arising from organic mechanism; nor is it something that any society can demand as the duty of a citizen. In a dictatorship, whether of classroom or country, an early conspicuous efficiency is followed by a subtle deterioration as the individual mind ceases to function at its highest level or to join effectively with other minds. If, in a democracy, brain power is to be mobilized and devoted to a high order of social service, it is our children growing into men who must lead the way.

Educating Citizens of Tomorrow

RALPH W. SOCKMAN

Pastor, Christ Church, Methodist, New York City

YOUTH must be made to feel that there is a tomorrow worth working for. One of the greatest contributions America can make to the world in this dark hour is hope. We are the land of the American dream. Our fathers from generation to generation have been fired with the dream of a land wherein life shall be richer and better, with opportunity for every person. For us to lose that faith now would be to extinguish one of the last beacons in our darkening world. Let us not allow the pessimism that is now pervading philosophy and theology to invade the minds of youth. Let us convince the young that all is not over just because everything is interrupted.

If democracy cannot give youth a dynamic social faith, some other political theory will. Disillusionment is the soil from which demagogues and dictators spring. We must have something to believe in, something to hold to. At present higher education is failing to give our graduates great centralizing, motivating purposes. University curriculums are encyclopedic in volume but the students wander aimlessly amid the maze of courses, and come out of college having learned a few technics to live by but no great objectives to live for. The goal of individual success, which has been emphasized by our go-getter commercialism, is not adequate for tomorrow's citizenship. It develops an atomistic society as dangerous as a communistic order. Sand without cement does not make a sure foundation. Young people trained on an individualistic basis lack the power to hold together. What we belong to is more important than what belongs to us and the young must be made to see this or democracy will disintegrate.

The regimental governments of Europe which treat the young as cannon fodder are desperately bad, but the perversion of democracy which treats government as a pork-barrel is not much better. We must see that while governments exist to guarantee the rights of individuals, nevertheless, individuals do not receive the blessings of their land unless they have a sense of belonging to it. We must lose our individualism in group life in order to find our individuality.

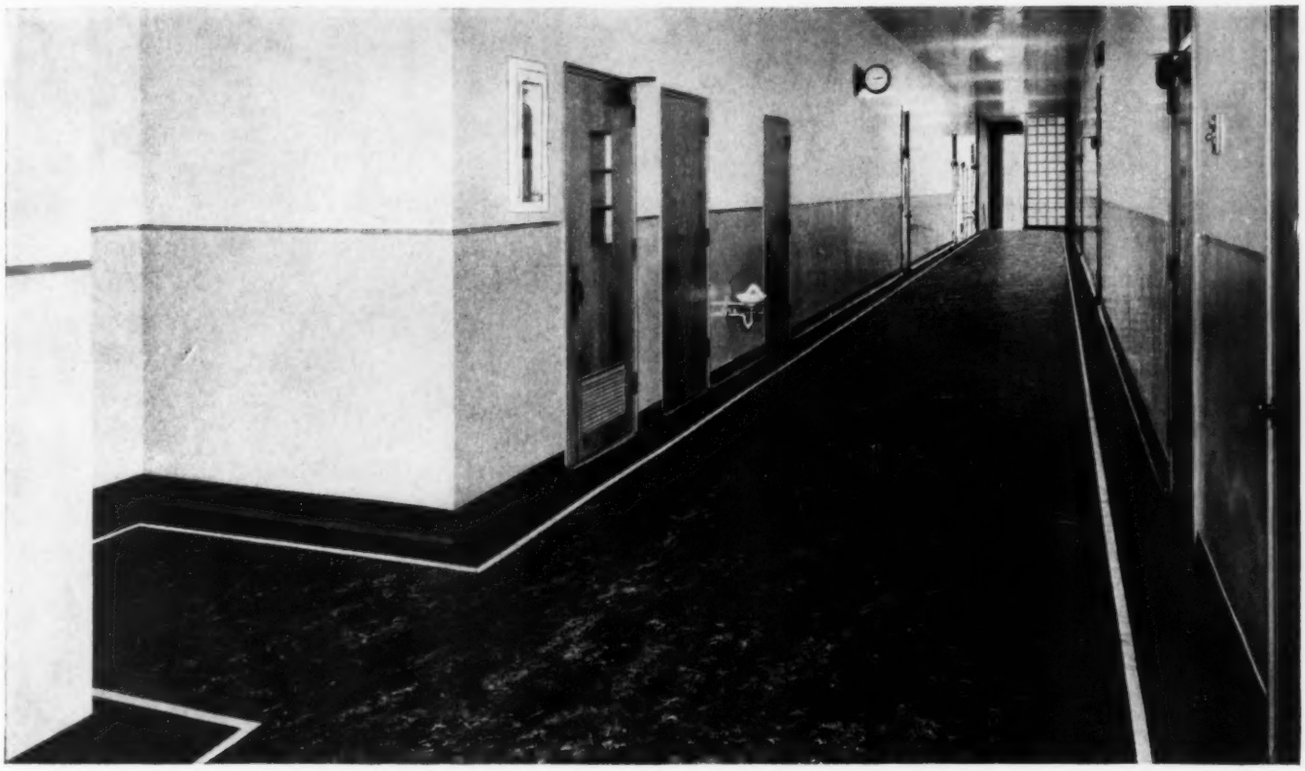
At present we tend to play upon the motives of fear and hatred. We can readily organize "anti" meetings against some race, some nation, some "ism." But youth nurtured in an atmosphere of hatred will grow up stunted in soul. It is impossible to keep the school air-conditioned against fear and anger when these influences permeate our homes and motion pictures, but teachers must do their best to protect the young from deforming race prejudices and national hatreds. The school and the church must be kept as centers where minds are rallied around their loves and hopes rather than around their hates and fears.

The only sane way to make the world safe for democracy is to keep democracy out of war. It is said that democracies can go to war and then return to their democratic principles after the struggle is over, as was done twenty years ago. But how can they do it? We are living in a far more fluid world than that of the last war. We are in the midst of a social revolution so vast and deep that to think we can stabilize the world by removing a couple of dictators is as futile as to think we could calm a storm at sea by skimming off the white caps.

Ultimately, the best preparedness of any nation is not in its immediate material equipment but in the mental resourcefulness and the spiritual morals of its citizens. We must not allow the exigencies of military preparedness to weaken the support of education or distort its long-range perspectives. The strongest nations tomorrow will be those with the firmest faith in their ideals, the most effective social organizations and the deepest springs of moral and spiritual power.

Determined as we are to keep this country at peace, we must not allow the citizens of tomorrow to become soft. With our emphasis on athletics, we are not likely to weaken the bodies of youth. But our cult of comfort tends toward a softening of character. The idea of sacrifice seems unreal to youth. We refuse to hold ourselves up to hard situations. We let ourselves off and down. We dislike to face hard facts even in our thinking and we have many escapes, like the motion pictures, whereby we can step out of stern realities into the romances of pleasant make-believe.

All this must be curbed. We must develop inner stamina, the capacity for straight, hard thinking and strong, self-reliant living. We have plenty of quick courage, adequate to start a war, but we need more fortitude able to sustain us in the long hard pull for peace.



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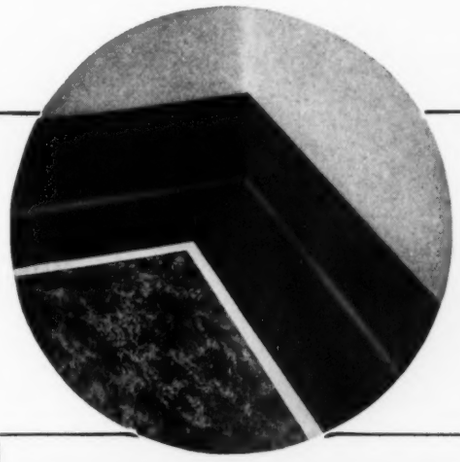

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Federal Aid by Distortion

M. M. CHAMBERS
Specialist in School Law

I WROTE optimistically about the coming of balanced federal aid to the states for general public education in The NATION'S SCHOOLS four years ago[1] and two years ago.[2] What progress can be reported now, early in the year of grace 1941? There is much to be noticed and a great deal to be thought about.

Note, if you will, that (1) the principle of federal aid to the states for general education is now espoused more widely than ever before; (2) a sound, detailed and carefully worked out initial program has been made available to the Congress and the public, and (3) actual federal participation in the financial support of educational activities in the states is today considerable and varied though not well balanced.

To illustrate the fact that educators are coming nearer to unanimity of opinion, we may note that two lifelong students and teachers of school finance, Fletcher Harper Swift and Paul R. Mort, have repeatedly put themselves on record to the effect that federal aid for general education is inevitable and overdue. To mention only a few contemporary educational administrators who are in accord with this view, one may cite Zook, Dykstra, Studebaker, Givens, Strayer, Edwards, Reeves and Rainey.

Unanimity as to Principle

There have been disagreements, it is true, concerning such details as whether or not the states should be allowed at their option to use federal money for transportation and textbooks for pupils attending nonpublic schools. Interminable arguments go on regarding the precise form and degree of federal control which should or would follow the federal funds, but these do not impair the substantial unanimity as to the general principle.

Not only educators of North, South, East and West of differing religions and of different races but also distinguished laymen of equally diverse backgrounds have publicly advocated the principle of federal aid. Among financiers and industrialists, Owen D. Young and Henry I. Harriman; among journalists, Chester H. Rowell; in literature, Dorothy Canfield Fisher; in social work, Miriam Van Waters; among labor organizations, both the A.F. of L. and the C.I.O. are on record.

Great national deliberative committees of educators and laymen have urged the principle with increasing intensity and frequency. Offhand, one may cite the Hoover National Advisory Committee on Education (1931), the Roosevelt Advisory Committee on Education (1938), the Educational Policies Commission and the American Youth Commission of the American Council on Education.

Public Is Well Informed

So widely have the essential facts regarding the nation-wide picture of educational finance been disseminated that in 1940 a public opinion poll conducted according to the accurate modern method of sampling the population revealed that 50 per cent of the public is well aware that certain states are so poor that they cannot afford schools as good as those in other parts of the country. Only 27 per cent expressed disbelief of that fact. Significant, too, is the circumstance that the fact is apparently better known among the people of the more fortunate states than in the poorer states.

Appropriate means of implementing the principle of balanced federal aid are at hand in the report of the Advisory Committee on Education issued in February 1938.[3] The carefully worked out plan therein presented has been substantially embodied in bills before both houses of Congress. The stage is superbly set for action.

Meantime, what has happened? In the national emergency thrust upon us by the course of international events, eyes have turned to a short-range upbuilding of the national industrial and military strength. Within recent months the Congress has appropriated an aggregate of approximately $75,000,000 for the operation of a federally supported and largely federally controlled plan of short-term technical training in selected public schools and in schools of engineering, designed to prepare prospective workers for defense industries.

Haste Distorts Federal Aid

Ironically, the total appropriated is slightly larger than the amount recommended for the first year of a balanced program of federal aid to the states for general education. The satisfaction with which this substantial increase in federal participation in the financial support of educational activities might have been universally hailed is tempered by the fact that here we have a narrowly conceived vocational training hastily mushroomed, with a further intrusion of federal control into state and local school systems, with an accentuated distortion of their programs.

Federal participation comes not in accordance with a deliberately planned balanced program adjusted to the relative needs of the states and designed to preserve their control of their own educational systems as a whole; instead, it comes piecemeal and pell-mell in the fever of emergency and hits a spot on the rim of the target instead of the bull's-eye. The situation being what it is, one cannot cavil. One can only point out that the bull's-eye has not been hit.

The maximum development of our national strength and safety rests in large degree upon the upbuilding of education, health, employment and recreation for all our people. In the face of the current emergency, the American Youth Commission, after five years of study of these essentials, did not content itself with recommending any narrow and

[1] Federal Aid on the Horizon, The NATION'S SCHOOLS **19:** 29 (Jan.) 1937.
[2] Federal Aid Without Control, The NATION'S SCHOOLS **23:** 53 (Feb.) 1939.
[3] Advisory Committee on Education. Report of the Committee. Washington, D. C.: Government Printing Office, 1938. Pp. 243. 35 cents.

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hasty expansion of vocational training in public schools. Instead, it deliberately urged immediate inauguration of the plan of balanced federal aid to the states for general education, conceived with sufficient breadth to include appropriate local provision for health and recreation.

We have before us a choice that is much more than academic. Shall we get increased federal participation in the financing of education by the methods of the opportunist, seizing whatever flotsam that may be thrown up on successive waves of popular hysteria and building the structure of educational finance of such nondescript materials, or shall we get it by straight-forwardly insisting, as the American Youth Commission and other national deliberative committees have done, that federal aid should come in accordance with a plan carefully worked out to preserve the integrity of state control of education and to effect a reasonable equality of educational opportunity throughout the land?

From week to week this question presents itself in different guises. For example, there is before Congress a bill that would make federal appropriations specifically for the purpose of schooling foreign-born persons and for the civic education of youth and adults. That it has palpable connection with the current emergency no one can deny. That it is a politically potent device to get larger federal support I cannot gainsay. Nor would I doubt that it is inspired by motives of the highest patriotism. But of making yet another type of educational activity a special concern of the national government I am frankly dubious. Do we want two educational systems, one state and one federal?

The Civilian Conservation Corps, supported and controlled by the federal government, is to a large extent an educational enterprise, albeit in that respect it has many shortcomings. Since river basins and watersheds are no respecters of state boundaries, it is probably essential that the C.C.C. continue as a federally administered undertaking. But it is most unfortunate that concerning work-camp life as an educational experience for youth we have had much talk and little action toward building work-camp activities as an integral part of our state and local educational systems. Among the many advantages inherent in such a scheme are the keeping of the camp within a reasonable distance of the schools and the facilitating of smooth transitions from school to camp and vice versa when the development of individual youths favors a change. Then, too, the work camp would no longer be a class institution chiefly for boys of the lower economic and intellectual strata but could become a truly democratic training ground for youths of all types and classes, with its personnel expanded during the favorable summer months and contracted considerably during the academic year.

Federal participation in educational activities in the states also goes on apace through the agency of the National Youth Administration and the Work Projects Administration. The student aid programs, the work-guidance-training projects, the nursery schools and the adult classes, all serve admirable purposes. Undoubtedly some of them should continue permanently in approximately their present form, with improvements in their administration as indicated by experience.

But it is high time that real efforts be made to enable the states to build up similar services under state and local control. This can be done by entrusting our 48 commonwealths with federal financial aid distributed according to relative educational need and by allowing them to continue the evolution of general public education as a state function. That is the way to reap the benefits of the immense diversity of our land and people and to preserve the priceless vitality of local initiative. That is the way to build a strong, varied and dynamic national culture, growing to keep abreast of an advancing democracy.

The necessity for federal participation in the support of education in the states is urgent. It is, perhaps, better to have it come piecemeal and with a distorting effect than to have it not come at all. By all means, however, let us act to achieve the ideal of balanced federal aid for general education under state and local control. This means the enactment of the plan embodied in the well-known report of the Advisory Committee on Education and favored by educators and laymen from coast to coast.

Science Club Fingerprints Pupils

OFTEN it has been impossible for law enforcement agencies to identify bodies, missing persons and amnesia victims because of lack of information about the person. Since the Federal Bureau of Investigation maintains a fingerprint file for civilians, the Orange Science Club of Orange Centralized High School, Galena, Ohio, decided to offer its assistance in fingerprinting the pupils enrolled in that school.

Personal identification cards were supplied by the F.B.I. and a local law enforcement authority helped the science club members in taking the fingerprint impressions.

Although members of the club spent most of the time in taking the prints, they were able to recognize the main patterns into which prints are divided.

Members of the club have listed some of the simple aids to help other schools in taking fingerprints:

1. Cut an old auto windshield into strips about 2 inches wide for the inking plates.

2. Spread two or three drops of printers' ink on the plate with a squeegee or printers' roller. Do not use too much ink.

3. When the fingers are inked, roll them from the difficult position to the easy position. This prevents sliding of the fingers and blurred prints.

4. Ink all fingers before placing the prints on the data sheet.

5. Fold the data sheet, place the part not being used under the cover of a book, place the book at the edge of the table and then roll the fingers into the appropriate squares.

6. The data concerning the person are taken on a blank sheet of paper at the same time the prints are taken and then the club members doing the typing have only the transfer of information to complete.

7. Pictures are attached to the card with Scotch tape.—*Science Observer.*

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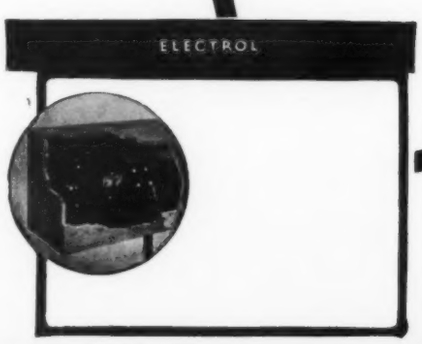

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How to Avoid Bus Accidents

HAROLD H. PUNKE

Georgia State Woman's College, Valdosta, Ga.

SEVERAL points regarding accident prevention emerge from a study of the situations in which accidents occur. The question may arise, for example, as to how far the design of school buses should follow that of commercial buses. In school bus construction, windows should be so placed that a child at the door outside, with his limited height, can be seen from the driver's seat. Doors should be controlled from that seat. Safety glass seems a legitimate present day expectation and the bus should provide each child a seat, thus reducing hazards from standing and crowding.

Other points relate to entry, seating and discharge from buses. When a bus is late in reaching its loading place at school, children tend to crowd around it, out of eagerness to get in or out. Hazard is here accentuated if the bus carries a great many children. Scheduling buses to arrive for loading before the children are ready or placing teachers in charge of loading should reduce loading hazard.

The older pupils might, perhaps, help supervise loading. Similar precautions relate to unloading at school, to make sure that pupils leave the bus promptly and thus avoid injury as it backs or turns. Hazards may be reduced if buses leave unloading places promptly, so that children in play do not become injured.

Care in Pupil Seating

Some of the danger of falling or of being thrown from a bus might be reduced by care in pupil seating. Much depends on bus design but if some seats offer more hazard than others young children should not occupy those seats.

More care could be exercised in discharging pupils along bus routes. The driver might leave his seat to supervise pupil exit, especially in case of young children or those crossing a highway in going home. Hazard might be reduced if children passed in front of the bus to cross the highway, rather than behind it. By crossing in front children remain within the driver's view until they are across the highway.

Certain changes in traffic regulations are conceivable. Since school buses are few and other vehicles are many, social effort might be more fruitful if directed toward regulating buses more and other vehicles less. Perhaps where children live on the left side of the road the bus could cross to the left to discharge them, as a man does in turning at his gate or as mail carriers often do. This would necessitate a door on the left side of the bus, either directly behind the driver's seat or in a position analogous to the usual door at the right in buses operated from a central position.

Better to Park on Left Side

When there is heavy traffic on the left side of the road, hazard becomes a matter of whether or not a mature driver or an immature child is the more competent to steer through traffic. If neither is particularly competent, it would seem that lights and fenders of buses are more replaceable than limbs and lives of children.

To facilitate ready recognition of school buses on highways, so drivers in general can use caution, a uniform and unusual color might be an asset for school buses.

The color of fire trucks suggests the idea. The advantage of color uniformity extending to the nation, rather than merely to one state, should be obvious in a touring-conscious society. However, if school buses have preferred status on highways, there should be restrictions on their nonschool use by private owners or others.

A further point relates to bus routing. Obviously, routes should avoid grade crossings if possible. The same thought applies to some arterial highways. To this end school officials and highway departments might collaborate in locating consolidated schools and in surveying for improved highways.

Following are actual accident situations, obtained by analyzing court decisions relating to pupil injury through school bus transportation:

Circumstances under which children enter buses may be associated with injury. Children eager to get particular seats or in milling around may crowd near the door as the bus approaches to take them home. Danger is increased if the bus fails to arrive before children accumulate for loading. Thus a 13 year old Virginia boy[1] was crowded in such a way, as the bus approached, that he fell. A rear wheel passed over him and he died later from the injury. In West Virginia[2] several children ran alongside a late bus as it approached its loading place; some apparently held to the handle of the side door. A 10 year old boy was run over and apparently the driver did not know of the injury until he returned to the scene of the accident, after finding a convenient place to turn around, and found the boy lying in the road.

Accident Caused by Crowding

In another instance[3] a bus had come to a stop at its usual station for picking up children to take them to school. "The waiting children, about 50 in number, crowded around the entrance door." One child had his foot raised to step into the bus, although the door had not yet opened, when suddenly the bus pulled ahead a few feet. The child was thrown under the bus, the rear wheel ran over his legs. A school bus in Washington[4] passed through a little town en route from school to the homes of children. A youth did not enter the bus at school but as it passed through town he rushed out of a store and jumped on the side. His footing slipped but he held on with his hands and was dragged a short distance before relaxing his hold. He

[1]Wynn *v.* Gandy, 197 S.E. 527 (1938).
[2]Keirn *v.* McLaughlin, 1 S.E. (2d) 176 (1939).
[3]Biozis et al. *v.* Public Service Coordinated Transport, 115 N.J. Law 407, 180 A. 553 (1935).
[4]Nouguier *v.* Morgan et al. 141 Wash. 144, 250 P. 954 (1926).

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When a bus is late in reaching its loading place at school, children crowd around it. Scheduling buses to arrive before the children are ready or placing teachers in charge of loading should reduce the hazard.

fell and a wheel passed over his body.

A 13 year old New Jersey youth was similarly injured[5]. As the bus, with the door open, crossed a street intersection to the loading place of some 15 children, he started across the intersection to meet it and apparently to get a preferred seat. As he grabbed the handles and jumped on the step below the door, the bus lurched in coming off the pavement to the gravel shoulder at the loading point. The boy slipped and was run over.

An 11 year old Wisconsin boy[6], apparently somewhat retarded mentally, wandered from the safe and rather direct path which other children took from the schoolhouse to the point at which the bus was parked on an adjoining highway. The bus driver, upon parking, shut off the motor and waited in the bus for the pupils to enter. The boy was hit by a truck on the highway. In one case[7] a youth was being transported with others from the athletic field to the school building in a dump truck. As he stepped on the wheel to climb into the truck, the truck started. He fell and the wheel ran over him.

In some instances a child falls or is thrown from the transportation vehicle. Thus in the early 1920s a 9 year old New York girl[8], being transported in a wagon which apparently was in part canvas covered, fell over a wheel. She was caught in the wheel and her leg wound around the axle as the team went a rod before being stopped. A 7 year old Texas boy[9] fell from a bus and was killed instantly when a rear wheel passed over his head. Another case relates to a 14 year old boy who was riding on the open doorstep of a bus, facing the direction in which the bus was moving[10]. When the bus passed over some chuckholes in a generally smooth road, the boy was thrown off and suffered a pelvic injury. Similarly in the Rogers case[11] a 12 year old girl was injured upon falling from a bus.

Other cases in which children fell, jumped or were thrown from school buses relate to bus doors suddenly opening. Thus in the Benton case[12] the bus was crowded and some children had to stand up. As the bus moved along the road a child was "pushed against the door, which suddenly opened because of a defective latch." The child "fell through the open door to the ground, and thereby suffered the injuries from which he died."

A Florida bus[13] had screen or wire grating to prevent children from reaching out and being injured by passing vehicles. On the door the grating had broken loose, and a child reached through to the handle outside the door and threw the door open while the bus was in motion.

A 7 year old boy made his exit through the doorway and, having alighted, attempted to cross the highway. He was struck by a log truck. Both thighs were broken and one rib, injured; he was confined to a hospital for six weeks and seemed permanently injured.

A Tennessee bus driver[14] allowed an emergency door in the rear of the bus to remain open much of the time when traveling. The door was 21 inches from the ground and there was no step. As the bus passed a lane leading to the home of a 12 year old boy, he either jumped or fell from the bus and was injured; no one saw his exit. An 8 year old boy in Iowa[15] was similarly injured by falling, or being thrown, through an open doorway. The boy and his brother were riding on the front seat with the driver when suddenly, allegedly because of a defective latch, the right door opened and the boy made his exit.

Injury often occurs as pupils alight from buses on the right side of the road and attempt to cross the road to their homes on the left side[16]. Frequently a child alights from a right front door, passes to the rear and crosses the road close behind the bus. Failing to see a car approaching from the opposite direction, the child may be struck. This occurred in the Shannon case[17], in which a 10 year old boy was injured. Under similar circumstances a six year old Washington girl[18] was severely injured and died later from the injuries, while a 7 year old Texas child[19] was killed on the highway when struck.

In two cases children were discharged as the bus stood in the middle of the road. In one case[20]

[5]Hammond et al. *v.* Wacker, 107 N.J. Law 438, 154 A. 735 (1931).

[6]Swenson *v.* Van Harpen et al., 283 N.W. 309 (1939).

[7]Beardsell *v.* Tilton School, 200 A. 783 (N.H., 1938).

[8]Williams *v.* Board of Trustees of District No. 1, Town of Eaton, 204 App. Div. 566, 198 N.Y.S. 476 (1923).

[9]Lewis et ux. *v.* Halbert et al., 67 S.W. (2d) 430 (1933).

[10]Embody *v.* Cox, 157 Wash. 464, 289 P. 44 (1930).

[11]Rogers et al. *v.* Butler, 92 S.W. (2d) 414 (Tenn., 1936).

[12]Benton *v.* Board of Education of Cumberland County et al., 201 N.C. 653, 161 S.E. 96 (1931).

[13]Burnett *v.* Allen, rehearing denied, 114 Fla. 489, 154 So. 515 (1934); followed in 114 Fla. 499, 154 So. 519 (1934).

[14]Marion County et al. *v.* Cantrell, 61 S.W. (2d) 477 (1933).

[15]Hibbs *v.* Independent School District of Green Mountain et al., 281 Ia. 841, 251 N.W. 606 (1933).

[16]Stuckwish et al. *v.* Hagan Corporation et al. 316 Pa. 513, 175 A. 381 (1934); Gaudette *v.* McLaughlin, 189 A. 872 (N.H. 1937); Pendarvis *v.* Pfeifer, 182 So. 307 (Fla. 1938); Pelfrey *v.* Snowden et al., 267 Ky. 432, 102 S.W. (2d) 352 (1937).

[17]Shannon et al. *v.* Central-Gaither Union School District et al., rehearing denied, 23 P. (2d) 769 (Calif., 1933).

[18]Phillips *v.* Hardgrove et al., 161 Wash. 121, 296 P. 559 (1931).

[19]Robinson *v.* Draper, 127 S.W. (2d) 181 (1939), modifying Draper *v.* Robinson, 106 S.W. (2d) 825 (1937).

[20]Machenheimer *v.* Falknor, 144 Wash. 27, 255 P. 1031 (1927).

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More care could be exercised in discharging pupils along bus routes. Hazard might be reduced if children passed in front of the bus to cross the highway, thus remaining within the driver's view until they have safely crossed.

when the left wheels were well to the left of the center line, a car struck the last of five or six children to alight—a 13 year old boy—and as the bus hesitated from ten to fifteen minutes after the accident several cars traveling in the same direction passed it on the right side.

In another case[21] three children were similarly discharged in the middle of the road. An Ohio driver[22] discharged a 6 year old boy at such a point that he had to walk in front of the bus and on down the highway some 160 feet, before reaching the entrance to his home. No reason appeared for discharging the boy at this distance.

In a different type of case a boy[23] apparently loitered near the bus after alighting and was run over when it started. A 6 year old Louisiana boy[24], after having safely alighted, apparently stepped toward the bus before it started and got his left foot run over. Backing of the bus in its usual manner, preliminary to turning around after discharging pupils at school, caused severe injury to a 9 year old South Carolina boy[25]. Parking a bus at the foot of an incline near the school building where children were coasting with sleds, while the driver was in the building talking with a teacher, resulted in injury to a 14 year old Oregon boy[26].

Although negligence or incompetence of drivers could be charged in most cases involving injury to pupils being transported, many such cases deal mainly with caution in supervising the cargo rather than with skill in operating the vehicle. In some cases, however, sheer lack of skill in vehicle operation seems a direct cause of pupil injury. Thus two cases arose from buses turning over. In one case[27] the bus was moving along a level road, approximately 15 m.p.h., when the front part went into a side ditch 3 or 4 feet deep. When the bus turned over a 17 year old boy suffered a mastoid injury, resulting in his death six weeks later. In the other case[28] the bus skidded one rainy morning so the rear end struck a culvert abutment. When the bus overturned a 14 year old girl was permanently injured. A Georgia school bus[29] was being driven at an illegal speed. Upon bringing the bus to a sudden stop it skidded and a child was thrown from the bus and killed.

In some cases buses have collided with other vehicles, with consequent injury to pupils. Thus a California bus[30] sideswiped a truck hauling sweat boxes when the two vehicles crossed a bridge at the same time, coming from opposite directions. A boy in the bus had his arm on the window sill; because of the sideswipe a box fell upon his arm and broke it. In another case two children had their left arms broken when their arms rested on window sills as the bus sideswiped a coupe on a bridge[31].

Smoke was the cause of such low visibility in another case[32] that a driver could see only about 5 feet ahead of his car. The bus and a car, both driving at excessive speed under the conditions, collided. A girl riding in the bus was permanently injured, causing partial paralysis and shriveling of her right side, including arm, shoulder, breast, neck and face.

In some instances the general inappropriateness of the conveyance, in design and repair, may contribute to accident and injury. This was noted in the Burnett case where the door grating fell into disrepair. It was also noted in cases of injury traceable to defective door latches. In a Washington bus[33] children entered through folding doors having glass panels. A 13 year old boy, when crowded upon entering the bus, lost his balance and his hands passed through a panel. In 1904 a New Hampshire conveyance[34] was so cold and uncomfortable as to endanger pupil health and one child allegedly "became sick and suffered with a congestion of the lungs" in consequence.

In a group of cases[35] it appears that owing to the construction of the bus, because of width of the body, the position of windows or other reasons, the driver was unable to see a child alongside the bus or hanging on the handle of the door. Such bus construction might obviously contribute to pupil injury by obstructing driver supervision. The same applies to buses in which the driver rides in a cab separate from the bus body carrying the children[36] or to buses having doors not controlled from the driver's seat.

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[21]Reeves et al. *v.* Tittle, rehearing denied, 129 S.W. (2d) 364 (Tex., 1939).

[22]Tipton *v.* Willey, 47 Ohio App. 236, 191 N.E. 804 (1934).

[23]Dickerhoof *v.* Bair, 54 Ohio App. 320, 6 N.E. (2d) 990 (1936).

[24]Delhomer et al. *v.* St. John the Baptist Parish School Board et al., 12 La. App. 580, 126 So. 272 (1930).

[25]Sherbert *v.* School District No. 85, Spartanburg County, 169 S.C. 19, 168 S.E. 391 (1933).

[26]Fahlstrom *v.* Denk. 143 Ore. 514, 23 P. (2d) 325 (1933).

[27]Olson *v.* Cushman, 276 N.W. 777 (Ia., 1937).

[28]Consolidated School District No. 1 of Tulsa County et al. *v.* Wright, 128 Okla. 193, 261 P. 953, 56 A.L.R. 152 (1927); Wright *v.* Consolidated School District No. 1 of Tulsa County, 162 Okla. 110, 19 P. (2d) 369 (1933).

[29]Roberts *v.* Baker et al., 196 S.E. 104 (1938).

[30]Haase et al. *v.* Central Union High School District et al., 59 P. (2d) 193 (1936), 80 P. (2d) 1044 (1938).

[31]Bates *v.* Escondido Union High School District of San Diego County et al., 9 Calif. App. (2d) 43, 48 P. (2d) 728 (1935).

[32]Smith *v.* Fall River Joint Union High School District et al., 118 Calif. App. 673, 5 P. (2d) 930 (1931).

[33]Leach *v.* School District No. 322 of Thurston County, 85 P. (2d) 666 (1938).

[34]Harris *v.* Salem School District, 72 N.H. 424, 57 A. 332.

[35]Wynn *v.* Gandy, 197 S.E. 527 (Va., 1938); Nouguier *v.* Morgan et al., 141 Wash. 144, 250 P. 954 (1926); Keirn *v.* McLaughlin, 1 S.E. (2d) 176 (W. Va., 1939).

[36]Gaudette *v.* McLaughlin, 189 A. 872 (N.H. 1937).

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Nutrition in a Small Cafeteria

BLANCHE E. BROWN
Cafeteria Director, Wilkes-Barre Day School, Forty Fort, Pa.

In the school cafeteria of the Wilkes-Barre Day School, Forty Fort, Pa., mealtime is cheerful but too much talking and excitement are discouraged.

WHEN it comes to eating, every child, and adult as well, is an individual problem. Dietetics is more than meal planning to obtain all desirable food factors; it is the dietitian's problem, too, to see that the meals are eaten. More than likely, the food containing the particular mineral or vitamin that the dietitian wished to include in the diet is the one left untasted. Thus, a small group in which the dietitian can become acquainted personally with all the children has its advantages.

The pupils in the Wilkes-Barre Day School at Forty Fort, Pa., a private institution, come from homes in which the problem is not how to obtain enough food but how to persuade the children to form correct habits and to eat a well-balanced diet.

The children in the first four primary classes are given a warm dinner at noon. It consists of soup, a meat, fish or egg dish, two vegetables, a salad, sandwiches, milk and a simple dessert, such as custard, pudding, cookie or fruit. The teachers eat with the children, who are served at tables. There are opportunities for teaching table manners and consideration for others in this type of service.

Most of the children enjoy their meals and eat heartily but at the beginning of the year there are usually a few new pupils who do not like to try a new dish or have been allowed to eat as they like. Sometimes it is a case of a pampered child who has been fussed over by indulgent parents. The parents usually want the school to overcome in a few days habits that have been formed over a five or six year period. They may have discussed before the child his likes and dislikes, coaxing him at one time and scolding him at another when he refused to eat what he should.

In dealing with this problem, the nutrition teacher makes every effort to obtain the confidence and cooperation of the parents and the other teachers. Meals are well cooked and attractively served. Special attention is given to seasoning and flavor. Mealtime is as cheerful as possible but too much talking, playing and excitement are discouraged.

Little notice is paid to the child who does not eat, while those who try new dishes and eat a good dinner are commended. Frequently, a child has remarked to the teacher: "I didn't like this at first but now I love it." It has proved successful to reward each child who has eaten a good dinner with a few animal crackers or candy. Often a child will finish his soup or eat his lettuce for the sake of getting a "prize."

Sometimes it takes months of patience to achieve results, but when parental cooperation has been obtained, marked improvement has resulted. The child who was the most difficult problem last year is one of the best eaters now. One mother was grateful when she came to realize that the cause of her little girl's refusal to eat regular meals was largely due to catering to her whims at home and to concern when she did not eat.

The same meal is served cafeteria style to the rest of the school, which includes the intermediate grades, high school and faculty. Here more choices are given, even a special favorite such as "wiener rolls" being served occasionally. Each individual chooses a full dinner or portions to make a luncheon as desired. But there is always opportunity for the dietitian to call attention to trays on which the choices are not a good combination.

For example, the overweight boy is advised to exchange an extra sandwich for a vegetable or salad or fruit; the undernourished girl who does not choose a warm portion on a winter's day can be persuaded to add a hot soup or warm vegetable to her tray.

While emphasis is placed on learning to eat a variety of foods, the dietitian studies individual tastes and dishes found to be unpopular are not repeated. Sometimes, however, a change in the method of cooking will make a difference, as was found when beets became popular after

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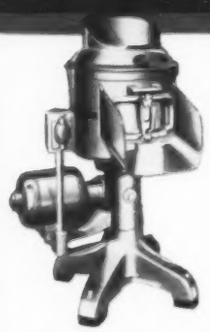

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they were seasoned a new way. The nutrition teacher gives special attention to anyone suffering from allergy and those who for religious reasons wish to avoid some particular food.

The cafeteria manager and dietitian is also the science teacher and every opportunity is used to teach nutrition in the science classes. The sixth year pupils are given special work in food values and taught why they need to select well-balanced meals and form the habit of eating a variety of foods rather than a few dishes that appeal to their tastes or whims. One year the class broadcast over the local radio station answering questions on the food facts they had learned.

Nutrition Unit in Biology

In the high school a special nutrition unit is given with the study of human biology. The girls are taught how to keep weight charts and how to plan balanced meals with reference to their individual requirements. They study about the digestive processes and the use of food in the body; make chemical tests for proteins, carbohydrates and fats; learn the importance of vitamins and minerals in the life processes and the need for eating some uncooked foods or those in which these factors are not destroyed by cooking.

The most interesting experiment of all is that of learning to control one's own weight and to maintain health without having to give up favorite foods entirely or leaving important foods, such as milk, out of the diet. It has been a real compensation to have old graduates return with the report that their food study has been most useful to them after leaving school.

On the walls of the cafeteria are a number of food charts made by nutrition pupils in connection with their work in the art department. An interested pupil can see at a glance which foods are principally used for growth, energy or health. Other posters picture those foods that rank high in important minerals and vitamins. Measured by the increasing number who buy a cafeteria lunch rather than bring a box from home, the growing interest in choosing a "good lunch" and the weight records, the Wilkes-Barre Day School cafeteria seems to be meeting the needs of the pupils it serves.

Facts on Fats and Oils

SIDNEY KAY

FATS and oils can be roughly divided in two groups. The solids are represented by the hydrogenated vegetable and animal fats, such as lard. Then there are the liquids, including all of the vegetable oils, such as corn, cottonseed, peanut, sesame, olive and soya. Each has its own characteristics and properties.

Let us first take up the subject of fats, which includes the vegetable shortening that is used principally in the baking field. All shortenings by weight have approximately the same food value, *i.e.* about 98 per cent digestible.

Shortenings from both the animal and vegetable groups are often similar in appearance but, chemically, it is easy to distinguish one from the other. Animal, as well as vegetable, shortening consists of a mixture of various fatty ingredients, which determine whether it is a liquid oil, semiplastic, plastic (like lard) or hard (like stearine).

How Shortenings Are Made

Through the process of hydrogenation, modern science makes it possible to change a liquid shortening into an entirely hard shortening or into a shortening of any degree of plasticity between the two extremes. This type of shortening is quite popular with bakers, especially for cake production. Briefly, the two reasons may be given as follows:

1. The creaming quality of an all hydrogenated shortening is superior to that of a compound, especially in the presence of water.
2. Depending upon the skill with which the fat is deodorized, shortening of this nature is usually free from odors and is neutral in taste. As a rule much more care is taken with the all hydrogenated fats than with the others.

Characteristics of Various Oils

Each of the oils has its own individual characteristics. With the exception of olive oil, which has a distinctive flavor, the other oils are usually tasteless, or if they have any flavor, it may be described as a slightly nutty one. Cottonseed oil is produced in the largest quantities and for this reason is the most widely used. Peanut oil, because it is the closest to olive oil in general characteristics, is often used to blend with olive oil to reduce its cost. It is one of the finest of the deep frying agents, but is not widely used because it is usually higher in price than the other oils. When straight peanut oil is used in mayonnaise care must be taken to see that the finished product is not subjected to freezing temperatures because this will cause it to break. Corn oil is one of the best all round oils because it freezes slowly and yet it can safely be heated to higher temperatures.

Time and Temperatures for Cooking Various Foods

Food	*Temperature*	*Time(Minutes)*
Saratoga chips	325° F.	5- 8
French fried potatoes (blanching)	365-375° F.	5-12
French fried potatoes (browning)	395-400° F.	2
Shoestring or julienne potatoes	325-335° F.	3-10
Latticed potatoes	350-375° F.	3-10
Scuffle potatoes (blanching)	225-240° F.	5- 8
Scuffle potatoes (puffing)	425° F.	1
Perch and smelts	370° F.	3- 5
Fillets	370° F.	4- 6
Fish cakes, croquettes	390° F.	1
Oysters	390° F.	1
Cutlets and breaded chops	360-400° F.	5- 8
Chicken in batter	375° F.	5- 8
Doughnuts	385-390° F.	3- 5
Fritters	370-380° F.	2- 5
Frankfurters	270° F.	1
Chinese noodles	380° F.	1
Almonds	240° F.	4- 6
Cashews	275° F.	3- 5
Blanching, peanuts	300° F.	3- 5
Spanish peanuts	350° F.	3- 5
Clams	380° F.	1½

Soya bean oil is rapidly coming to the front. Until recent years the quantity of this oil produced was quite small and it was used chiefly in the manufacture of paints. Since the farmer has found that soya bean is a fine replacement crop it has been planted more frequently and the oils are finding their way into the edible fields. Care must be taken in the selection of soya bean oil because the refining process has not yet been perfected to the point of overcoming rancidity completely.

One of the widest uses for the oils and fats is in the preparation of fried foods and it is interesting to note what steps should be taken to ensure the best possible results. Hydrogenated fats are used for frying in a great many kitchens because the fat is also used in baking and shortening. There are four general considerations to be watched in frying foods: (1) the kinds of fat used; (2) the preparation of the food; (3) the methods used, and (4) the care of the fat and frying equipment.

It is essential the fat must be able to stand up under the extreme temperatures encountered in deep frying. Smoking indicates the breaking down of the fat. Exposure to air and to moisture from foods fried in it causes fat to absorb oxygen and become rancid, and a good fat will resist the tendency to rancid tastes and odors. A fat must be neutral in flavor and odor so that it will not impart objectionable flavors to foods fried in it. The melting point of a fat should be such that foods fried in it are easily digestible.

A great deal depends upon how carefully foods are prepared for general frying purposes. If a food is dipped in cracker or bread crumbs, care should be taken to apply them as smoothly and evenly as possible. Any excess crumbs should be removed before frying. Some foods, especially those containing fat or protein, naturally turn brown more easily than others. A coating of eggs, bread crumbs and milk can be applied to food lacking these two constituents in order to produce a brown surface.

Excessive moisture on the surface of the food material will prevent the desired browning action, and a large surplus of moisture is likely to produce spattering and foaming. It is also essential that the individual pieces to be fried be of nearly uniform size. Otherwise, smaller pieces will be cooked through or even burned before the larger pieces are done.

In general, sufficient fat should be used to cover completely the food to be fried. At the same time the kettle should not be filled so full that the hot fat will bubble over the top when the food is added. Adding too much food at one time will cause bubbling over and at the same time lower the temperature of the fat sufficiently to give poor results. Whether gas or electricity is used it pays to have thermostatic control to maintain the desired temperature, especially if a considerable amount of continuous frying is to be done.

A deep frying wire basket has many advantages because it permits the food to be immersed slowly in the fat. This prevents sudden cooling with consequent high fat absorption. If the bubbling becomes too severe the basket can be withdrawn until it subsides. If a gas fired kettle is used the flame should not strike the outside of the kettle. Neither the kettle nor the fat should be allowed to overheat when not in use because excessive heat injures the fat.

In all frying work kettles and other frying equipment must be cleaned thoroughly at regular intervals. If a kettle is not cleaned the fat will decompose quickly. Fresh fat placed in a dirty kettle will become dark in color and strong in odor much more rapidly than it will if it is placed in a thoroughly cleaned kettle.

The length of time required to fry foods depends wholly on the amount to be fried at one time. The table on the preceding page shows temperatures and cooking time recommended.

Typical 10 Cent Plate Lunches

Suggested by Nutrition Service, Bureau of Child Hygiene, Ohio Department of Health

Bath Township School Cafeteria*

Beef stew with biscuit
Bread and butter sandwich
Stewed apricots
Milk (plain or chocolate)

Baked hash
Rolls and butter
Applesauce
Milk (plain or chocolate)

Cream of tomato soup
Swiss cheese on rye bread
Fruit gelatin
Milk (plain or chocolate)

Chile con carne
Bread and butter
Baked custard
Milk (plain or chocolate)

Creamed chicken on roll
Mashed potatoes
Cabbage, pineapple and marshmallow salad
Milk (plain or chocolate)

Escalloped potatoes
Egg salad sandwich
Fruit cup
Milk (plain or chocolate)

Johnny Marzetti (noodles, cheese, hamburger, onion and tomato)
Bread and butter
Waldorf salad
Milk (plain or chocolate)

Baked lima beans
Bread and butter
Molded fruit salad
Milk (plain or chocolate)

Yellow Springs School Cafeteria*

Escalloped potatoes with cheese
Mixed vegetable salad sandwich
Fresh fruit cup

Johnny Marzetti
Bread and butter
Salad bowl

Salmon à la casserole
Fresh tomato sandwich

Stuffed peaches (chopped fruit and whipped cream)

Creamed eggs
Apple butter sandwich
Fruit tapioca pudding

Escalloped corn
Deviled egg sandwich
Canned pear with cookie

* Both schools are in Greene County, Ohio. Individually purchased, the items on the lunches from these two schools would total 17 and 15 cents, respectively.

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News in Review

Junior College Growth

Continued rapid growth of junior colleges is revealed by the *Junior College Directory,* 1941, published by the American Association of Junior Colleges, which shows that enrollment in these institutions has doubled in the last six years and now totals 236,162.

This growth continues a rapid curve of advancement which has multiplied junior college enrollment fourfold in the last twelve years, the figure having virtually doubled between 1929 and 1935 and having more than redoubled in the six years since. Enrollment totaled 54,438 in 1929 and 107,807 in 1935.

Increase for the last year is 20.5 per cent. The jump was from 196,710 in 1940, a growth of 39,452 for the year.

The number of junior colleges is now 610, an addition of 35 for the year and an addition of 205 since 1929. Fifteen institutions are listed as having started junior college work in 1939 or 1940.

Average enrollment in 595 junior colleges for which figures are given is 397. There are 195 institutions having enrollment of more than 300, as compared with 164 of this size last year.

California continues to lead both in number and size of its junior colleges. Texas is second in number and Illinois is second in enrollment.

The 10 states leading in the number of their junior colleges are California, 64; Texas, 43; Iowa, 36; Oklahoma, 30; North Carolina, 25; Kansas, 24; Missouri, 24; Illinois, 24; Pennsylvania, 24; Massachusetts, 23.

The 10 states leading in enrollment are California, 86,357; Illinois, 19,589; Texas, 15,085; Missouri, 8143; North Carolina, 6602; Massachusetts, 5994; Kansas, 5798; Georgia, 5635; Oklahoma, 5409; Mississippi, 5205.

Forty-three per cent of the 610 junior colleges are publicly controlled and they have 71 per cent of the enrollment. There are 168,228 students in 261 publicly controlled junior colleges and 67,934 students in 349 privately controlled junior colleges.

INSTRUCTION

To School in a Box

At Mason City, Iowa, recently a young lad who had never seen the inside of the schoolhouse was elected president of his class at school.

Victim of infantile paralysis, he is one of Iowa's many physically handicapped children who are being educated by remote control in 15 school districts in which a two way electrical intercommunication system brings the classroom to their bedsides.

One portable unit of this device is located in the classroom where it picks up and instantly transmits every spoken word to the pupil's home station. There, propped up in bed or seated in a wheelchair, the unseen pupil truly has the best seat in the class. Like other pupils, he hears everything the teacher says and makes his recitation, which is heard by everyone in the class. He even follows his class around the school from room to room. For, as the class moves, so does the school station. It is carried by the teacher and plugged into the nearest outlet so the pupil hears his history from the history classroom and his science from the laboratory.

Use of the remote control classroom in Iowa school districts is limited to children in the fifth grade or above. To them the speaker system brings a full day's curriculum and contact with other children of their own age. The shut-in pupils become so enthusiastic that they participate in every event with vigor.

Besides the evident academic assistance, Iowa school authorities report that unpredicted supplementary advantages have accrued from the use of the intercommunication system. Diction of both teachers and pupils has improved because they realize that distant ears listen to their voices.

The program of assistance to incapacitated pupils has been made possible in Iowa through state aid whereby the local school districts are reimbursed for the relatively low cost of purchasing and installing the intercommunication system. The only cost to the pupil is the monthly wire rental from the telephone company, which has brought its rate down to less than 1 cent a day.

Tips for Success in College

College "success," as distinguished from merely scholarship, is dependent chiefly on four characteristics: purpose, social adjustment, ability to make decisions and sensitivity.

This is one of the chief findings reported in a pamphlet, "What It Takes to Make Good in College," which will be published early this month. Prepared by Samuel L. Hamilton, professor of education at New York University, the pamphlet summarizes the findings of "From School to College," a study in transition experience made in 40 typical men's colleges under supervision of the Yale University department of religious education.

Habits and motives that are acquired

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in the home play an important part in success or failure in college. Good relationships with parents, brothers and sisters were found to be important for success. Those who found that their parents were moderately interested in their affairs, rather than indifferent or oversolicitous, were the best adjusted group in college.

One indication of good home adjustment is a liking for the subject of English. Narrow reading interest seemed to go with poor home adjustment, whether reading was limited to newspaper only, to books and magazines only or to newspapers and magazines only.

MEETINGS

Annual Study Conference

The theme for the annual study conference of the Association for Childhood Education to be held in Oakland, Calif., July 8 to 12, is "Children, Teachers and Today's Crucial Problems."

Junior College Meeting

More than 1000 instructors and administrators representing junior colleges in all parts of the United States met in Chicago, February 27 to March 1, for the twenty-first annual meeting of the American Association of Junior Colleges. The meeting was held in Chicago to mark the current fiftieth anniversary celebration of the University of Chicago where the junior college movement originated.

President Robert M. Hutchins of the University of Chicago addressed the association's annual dinner on February 28 on "The Junior College and Terminal Education."

Problems of national defense constituted the main theme of the meeting.

Schoolmen's Week at Pennsylvania

The twenty-eighth annual meeting of Schoolmen's Week at the University of Pennsylvania will be held March 26 to 29. This meeting is sponsored by the university in cooperation with the Southeastern convention district of the Pennsylvania Education Association, the Philadelphia Teachers Association, Drexel Institute and a large number of school districts suburban to Philadelphia.

Participating in the more than 100 programs will be many educators, including the following: E. T. McSwain, Northwestern University; Boyd Bode, Ohio State University; Francis T. Spaulding, Harvard University; Harold Benjamin, University of Maryland; President Edmund E. Day, Cornell University; C. Gilbert Wrenn, American Council on Education; Gertrude Hildreth, Columbia University; Walter D. Cocking, University of Georgia; Karl Bigelow, American Council on Education.

Of special interest to school administrators will be programs in the following areas: respective responsibilities of the superintendent of schools and business manager for business administration; school reports for state purposes; personnel problems in state departments of education; the national defense program and the local school administrator; a series of eight programs pointed toward meeting the needs of the gifted and unadjusted youth.

ADMINISTRATION

Emergency Leave for Women

The Chicago superintendent of schools has been given authority to grant emergency leaves of absence for one year or more without pay, as may in his judgment fit the circumstances involved, to women teachers both regularly assigned and serving as probationary teachers who may wish to accompany their husbands who have been called upon to render military service.

Upon the return of the husband to a civilian status the teacher may, upon application, be returned to a position of a rank similar to that which she held prior to the granting of the emergency leave.

Grosse Pointe Honors Brownell

The name of Samuel Miller Brownell will be given to the junior high school in the six year secondary school at Grosse Pointe Farms, Mich. At the suggestion of Dr. E. R. Van Kleeck, superintendent of schools, the board of education voted to honor Doctor Brownell, for eleven years superintendent of schools at Grosse Pointe and now professor of educational administration in the graduate school at Yale University. Phenomenally rapid growth of the five Grosse Pointe communities resulted in construction of a new school or addition every year and a half during his superintendency.

Mrs. Mary G. Faulman recently was made chairman of the Brownell Junior High School, with Walter R. Cleminson as principal of it and of the Grosse Pointe High School. Charles E. Leavitt is principal of the system's new John D. Pierce Junior High School.

Uniform Salary Scale

A uniform basis for salary raises and promotions at Indiana State Teachers College at Terre Haute, Ind., has been announced by Dean of Instruction J. E. Grinnell. The set of criteria as adopted by a faculty committee is as follows: (1) teaching skill; (2) evidence of growth in (a) scholarship, (b) effectiveness and (c) reputation among scholars;

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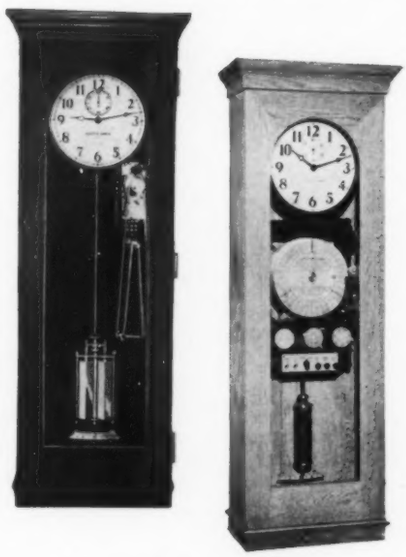

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(3) service to the college outside of the classroom; (4) general attitude toward the college and toward college policies, and (5) length of service to the college.

Films in Review

THE ALIMENTARY TRACT. 16 *mm., sound.* 400 *feet.* 1 *reel.* 12 *minutes. Erpi Classroom Films, Inc.,* 35-11 *Thirty-Fifth Avenue, Long Island City, N. Y. Subject: Biology and physiology. Grades* 10 *to* 12. *Rating B.*

This film shows the action of the organs of the alimentary tract by tracing the course of food from the time it is swallowed until it is in the lower intestine. Excellent closeup views are shown of the digestive organs of a frog after the skin had been laid back exposing the interior of its abdomen. It pictures in a remarkable way the involuntary movements of the stomach and the intestines that are so necessary in the digestive process. The effect of the nervous system is demonstrated by showing how drugs influence the peristaltic movements.

Were the accompanying lecture less technical it would probably be more understandable for high school pupils. However, this film does demonstrate an important function of the body in a manner impossible through any other medium and in a way that is both interesting and instructive.—*Reviewed by Ralph U. Swisher.*

HISTORICAL INTRODUCTION TO THE STUDY OF CHEMISTRY. 16 *mm., silent.* 400 *feet.* 1 *reel.* 12 *minutes. Eastman Classroom Films Inc., Rochester, N. Y. Grades* 7 *to* 12. *Rating B.*

This film is intended to give a scientifically accurate presentation of the birth of modern chemistry from the time of the savage's manipulation of metals to the present day.

The film begins with the earliest of times showing the crude methods that the ancients employed when they first began the use of metals. The alchemist is shown in his laboratory trying to produce gold from some substance. The king and queen and a large audience are there and they are pleased when the alchemist passes them the samples of the precious metal that he has prepared. Priestly is seen at work in his laboratory on the discovery of oxygen. The apparatus that he constructed is shown with the burning lens that he used to get his heat from the sun's rays. He appears much surprised at the properties of the gas as he discovers first one, then another.

The next scene shows Lavoisier at work in his laboratory. He has heard of the work of Priestly and is busy on his experiments in which he discovers the true nature of combustion. He is shown making observations, weighings and recording them on paper. The final scenes give some of the more modern applications of chemistry to everyday life.

The history of chemistry, according to this record, does not extend beyond the work of Lavoisier. This film would be good to increase interest in the study of chemistry, if shown at the beginning of a semester or shortly after it had started. —*Reviewed by* WILLIAM O. MAYROSE.

Film Releases

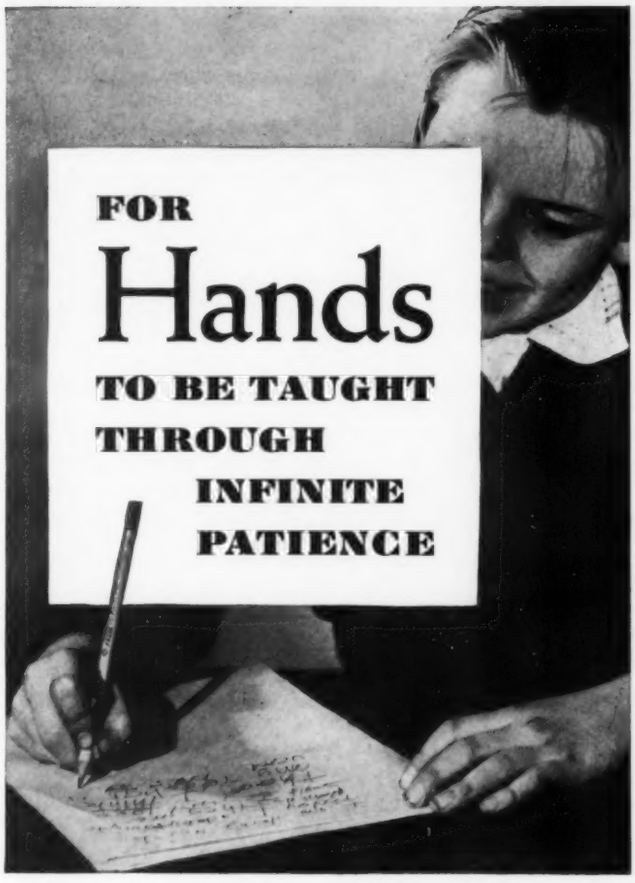
Our Bill of Rights—A short dramatization of the background and nature of the Bill of Rights, the fourth in the American Historical Series, produced by Academic Films. Running time, twenty minutes; sound. Garrison Films, Inc., 1600 Broadway, New York, N. Y.

The Last Stronghold—A new production on national defense, the second in a series of educational documentaries prepared expressly for the school field. The film is forty-five minutes in length and is available in 16 mm., sound, as well as in 35 mm. The film deals with events since 1914 which have led up to the present world catastrophe. Films Incorporated, 330 West Forty-Second Street, New York, N. Y.

Winning Baseball—A free loan film produced by the National League and the Chicago Cubs showing action shots of the last World Series, close decisions, slow motion views of dangerous batters, helpful hints and inside tips. 16 mm., sound. Burton Holmes Films, Inc., 7510 Ashland Avenue, Chicago.

Tom Sawyer Detective—An adventure story adhering faithfully to Mark Twain's novel of the same title. Tom and Huck Finn catch the diamond thieves and free Uncle Silas from a murder charge. There is an atmosphere of horse and buggy days. 16 mm., sound. Films Incorporated, 330 West Forty-Second Street, New York, N. Y.

The Causes and Immediate Effects of the First World War—A film for world history and European history classes. It deals with the diplomatic intrigue beginning in 1870, shows the formation of the Triple Alliance, the Triple Entente and the various crises that culminated in the war in 1914. Continuing through and after the war, the film deals with the Treaty of Versailles and its aftermath and brings us down to the immediate background which eventually led to the present war. All the great characters of the period appear in the film, most of the scenes being authentic, taken from



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RESEARCH

Food Service Study

Although not all cafeteria directors and lunchroom managers hold a college degree, the trend is in this direction, Constance C. Hart of the board of education, Rochester, N. Y., finds in a study made of lunchrooms in cities having a population of more than 50,000, published in the February issue of the *Journal of the American Dietetic Association*.

Most directors and managers are on a teacher's schedule although a few are on civil service status. Pupil help is used in almost all schools, the pupils being generally paid in food. In those instances in which they are paid in cash, the rate ranges from 15 to 40 cents per hour.

In addition to personnel, Miss Hart's findings also included other lunchroom problems. Purchasing is a fertile field which lunchroom people might profitably study more thoroughly. The healthy financial structure of the lunchroom is dependent upon efficient purchasing which, in turn, conditions the success of the lunchroom as a factor in promoting better nutrition.

Data on food cost accounting showed some interesting percentages. With sales considered 100 per cent, purchases run about 61 per cent; pay roll, 29 per cent; depreciation, repairs and replacement, about 3 per cent; gas and electricity, 2 per cent; cleaning supplies, 1 per cent, and other expenses, such as laundry, napkins and reserve, about 3 per cent.

Most schools charge 5 cents for each item on the menu. Plate lunches are featured in all schools, the majority offering a 10, 12 and 15 cent tray lunch, allowing about 65 per cent for raw food cost.

The per capita sales to children average 12 cents and to teachers, 17.5 cents.

The feeding of indigent children is one of the social as well as nutritive problems facing the lunchroom manager. The manager tries to guide their selection of food on a per capita allowance of from 5 to 15 cents.

In many schools a nutrition education program is stressed, usually with the cooperation of the administrative and teaching staffs.

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Because Seal-O-San penetrates deeper . . . fills all cracks . . . and covers the floor with a *tougher* seal, it keeps dirt from piercing the surface and getting a foothold. That's why a Seal-O-San finish looks clean—*remains clean longer.*

As an aid to sanitation in your school, refinish *all* wood floors with Seal-O-San. Their beautiful, clean appearance will be a source of pride every time you view them.

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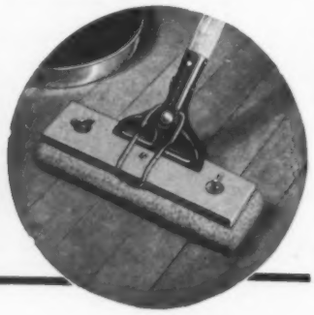


HEALTH

Calls for Survey

H.R. Bill 1798, introduced January 10 and referred to the committee on education, provides for a complete survey of "physical education resources existing within the United States now in use as outdoor recreative and competitive areas, gymnasiums, stadiums, swimming pools and parks, and for other purposes." It calls for a sufficient appropriation to carry out such a survey.

How to Develop a Program

How can a school develop and operate a health program? The U. S. Office of Education in a bulletin just issued entitled "Organization and Administration of School Health Work" points the way.

Administration of a school health program, the bulletin points out, divides into two parts: activities within the school and activities outside the school organization.

Activities within the school organization:

1. Conference with the superintendent and administrative staff of the schools.
2. Organization of the school's health department.
3. Cooperation with principals.
4. Enlistment and maintenance of the cooperation of the classroom teacher.
5. Cooperation with custodial force.

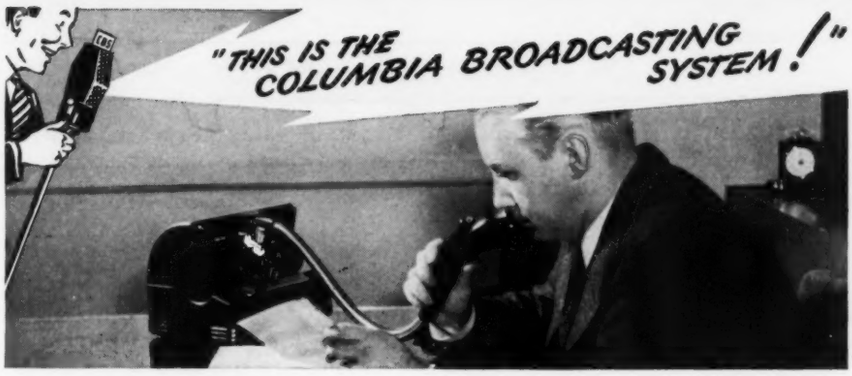
6. Selection of personnel.
7. Maintenance of health of employes.
8. Development of courses of study.
9. Physical examination of the children.
10. Services to special schools for children with special handicaps.
11. Dental hygiene.
12. Selection of textbooks.
13. The cafeteria and courses in home economics.
14. Arrangement of the school program.
15. Planning of new buildings.
16. Parent education.

Activities outside the school organization:

1. In cooperation with official agencies.
2. Cooperation with unofficial agencies.

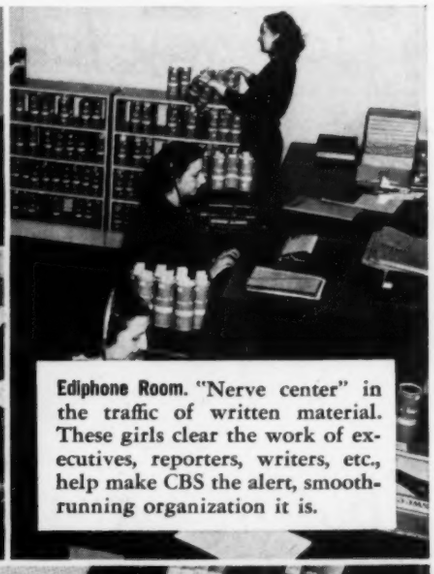
Coming Meetings

Feb. 27-Mar. 1—American Association of Junior Colleges, Stevens Hotel, Chicago.
March 27-29—Midwest Conference on Rural Education, University of Illinois, Urbana.
March 6-9—Southern Conference for Music Education, Charlotte, N. C.
March 15-19—North Central Music Educators Conference, Des Moines, Iowa.
March 29-April 2—Northwest Music Educators Conference, Spokane, Wash.
April 3-5—North Carolina Education Association, Asheville.
April 6-9—California-Western Music Educators Conference, San Jose, Calif.
April 9-11—Inland Empire Education Association, Spokane, Wash.
April 16-17—Eastern Arts Association, New York City.
April 15-18—National Catholic Educational Association, New Orleans.
April 16-19—Southwestern Music Educators Conference, Wichita, Kan.
April 30-May 3—N.E.A. Department of Health, Physical Education and Recreation, Atlantic City, N. J.
May 2-7—Eastern Music Educators Conference, Atlantic City, N. J.
May 5-9—American Association of University Women, Cincinnati.
June 20-21—Ohio Education Association, Cedar Point, Ohio.
June 29-July 3—National Education Association, Boston.
Oct. 9-11—Utah Education Association, Salt Lake City.
Oct. 16-18—Wyoming Education Association, Cheyenne.
Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.
Oct. 22-25—New Mexico Educational Association, Albuquerque.
Oct. 23-24—New Hampshire State Teachers Association, Nashua.
Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.
Oct. 24-25—Maryland State Teachers Association, Baltimore.
Oct. 29-31—West Virginia State Education Association, Charleston.
Oct. 29-31—North Dakota Education Association, Minot.
Oct. 29-31—Maine Teachers Association, Bangor.
Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.
Nov. 6-8—Iowa State Teachers Association, Des Moines.
Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.
Nov. 7-9—New Jersey Education Association, Atlantic City.
Nov. 13-15—Arizona Education Association, Phoenix.
Nov. 18-21—Virginia Education Association, Richmond.
Nov. 20-22—Texas State Teachers Association, Houston.
Nov. 26-29—Missouri State Teachers Association, St. Louis.
Dec. 29-31—Pennsylvania State Education Association, Harrisburg.

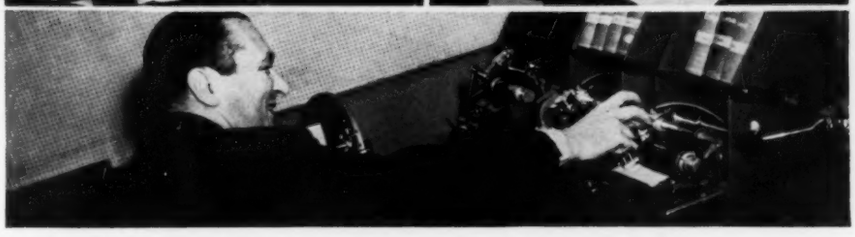


Over 1700 CBS people team up to bring you the latest news, entertainment . . . **Frank Stanton, Director of Research,** marshalls radio facts and figures—pours data, detail, statistics into his Ediphone to keep his mind free for analyses, executive matters—"And in these times I keep an Ediphone at home," he says.

Foreign News Reporter Gladys Kopf, translates a recorded flash from Vichy. European broadcasts are "waxed" on Ediphone records, translated, typed. CBS news files are a by-word for accuracy among radio and newspaper men.



Ediphone Room. "Nerve center" in the traffic of written material. These girls clear the work of executives, reporters, writers, etc., help make CBS the alert, smooth-running organization it is.



Henry B. Kranz "eavesdrops" on Berlin while special Ediphones record each word. Should some big event break, the translated news is flashed to CBS's 122 affiliated stations. (Speed and efficiency are yours too, with an Ediphone.)

Ed. East "writes" "Ask-it Basket" on a new desk Ediphone. "You have to record ideas *immediately* in my business," says this famous radio master of ceremonies. "I'd be lost without an Ediphone."

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Visit us at the Ediphone Exhibit E. C. T. A., Hotel Statler, Boston April 9-12

On the Air During March

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System, the Mutual Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Sundays

10:30 a.m.—National Youth Orchestra (CBS).
11:30 a.m.-12:00 noon—Music and American Youth (NBC Red).
12:30-1:00 p.m.—Wings Over America. Stirring and significant story of aviation (NBC Red).
1:00-1:15 p.m.—I'm an American. A series devoted to expositions by distinguished naturalized Americans of the privileges and responsibilities of the democratic way of life (NBC Blue).
1:00-1:15 p.m.—March of Health (MBS).
1:30 p.m.—March of Games. Children's quiz game program, directed by Nila Mack (CBS).
1:30-2:00 p.m.—On Your Job. Dramas of America's work and workers, based on research by Frank Ernest Hill of the American Association for Adult Education (NBC Red).
1:30-2:00 p.m.—Sundown on the Veldt. Josef Marais in folk songs of the African Bushveld (NBC Blue).
2:00 p.m.—Brazilian Exchange Program (CBS).
2:00-2:15 p.m.—American Pilgrimage. Broadcasts from the homes of famous American authors (NBC Blue).
2:00-2:30 p.m.—Free Company Broadcasts (CBS).
2:30-3:00 p.m.—University of Chicago Round Table (NBC Red).
2:30-2:45 p.m.—Foreign Policy Association Program (NBC Blue).
3:00 p.m.—New York Philharmonic-Symphony Orchestra. Directed by John Barbirolli. Deems Taylor, commentator (CBS).
3:00 p.m.—Columbia Symphony Orchestra (CBS).
3:00-4:00 p.m.—Great Plays. A series of masters' works tracing the development of drama (NBC Blue).
4:30 p.m.—Invitation to Learning. CBS Adult Education Board program (CBS).
4:30-5:00 p.m.—The World Is Yours. Produced by U. S. Office of Education and Smithsonian Institution (NBC Red).
4:30-5:00 p.m.—Pageant of Art. The dramatic story of fine arts through the ages (NBC Red).
7:30-8:00 p.m.—Speak Up, America. New quiz program developed to further better speech (NBC Blue).
8:00-8:45 p.m.—American Forum of the Air (MBS).
10:30 p.m.—Columbia Workshop. Produced by Douglas Coulter, CBS director of broadcasts.

Mondays

9:15-9:45 p.m.—American School of the Air: "Americans at Work" (CBS).[2]
2:30-3:00 p.m.—Rochester Civic Orchestra (NBC Blue).
3:45 p.m.—Columbia's Lecture Hall. Lectures on a variety of subjects by eminent speakers (CBS).
6:00-6:15 p.m.—Citizens All. Produced in cooperation with the National Congress of Parents and Teachers. A series of round table discussions on citizenship. Dean Ernest O. Melby of Northwestern University, chairman (NBC Red).
10:00-10:15 p.m.—Story-Dramas by Olmsted. Dramatized versions of the world's great short stories. Nelson Olmsted portrays all of the characters in his dramas. Mondays, Tuesdays and Wednesdays (NBC Blue).
10:30-11:00 p.m.—Adventure in Reading (NBC Blue).
10:30-11:00 p.m.—National Radio Forum. Questions of national interest discussed by men in Washington who are working on answers to political, economic and social problems (NBC Blue).

Tuesdays

9:15-9:45 a.m.—American School of the Air: "Wellsprings of Music" (CBS).
2:30-3:00 p.m.—United States Army Band. Capt. Thomas F. Darcy, conductor (NBC Blue).
3:45 p.m.—Children Also Are People. Talks by specialists in the field of child welfare, presented in cooperation with the New York City Committee on Mental Hygiene of the New York State Charities Aid Association (CBS).
10:15 p.m.—Invitation to Learning. An informal discussion of the world's classics by Huntington Cairns, Allen Tate and Mark Van Doren (CBS).
10:30-11:00 p.m.—Meet Edward Weeks. The editor of the *Atlantic Monthly* discusses and dramatizes literature (NBC Blue).

Wednesdays

9:15-9:45 a.m.—American School of the Air: "New Horizons" (CBS).
2:15-2:30 p.m.—Echoes of History. General Federation of Women's Clubs, producer (NBC Blue).
3:45 p.m.—Columbia Lecture Hall (CBS).
7:30-8:00 p.m.—Cavalcade of America. Dramatizations of American history (NBC Red).
8:00-8:30 p.m.—Quiz Kids. These children from the schools of Chicago and vicinity, all under 15, reveal an amazing fund of information (NBC Blue).
10:30-11:00 p.m.—Doctors at Work. Sixth annual health series presented by the American Medical Association (NBC Blue).

Thursdays

9:15-9:45 a.m.—American School of the Air: "Tales From Far and Near" (CBS).
12:00 noon-12:15 p.m.—Conservation Reporter (MBS).
12:15-12:45 p.m.—Navy School of Music (MBS).
3:45 p.m.—Adventures in Science. This program is planned in conjunction with Science Service (CBS).
9:35-10:30 p.m.—America's Town Meeting of the Air (NBC Blue).
10:30-11:00 p.m.—Musical Americana. Programs of American music with eminent solo-

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ists and symphony orchestra directed by Raymond Paige (NBC Red).

10:30-11:00 p.m.—The Listeners' Playhouse (NBC Red).

10:30-11:00 p.m.—Musical Americana. Programs of American music with symphony orchestra and mixed chorus directed by Raymond Paige (NBC Red).

Fridays

9:15-9:45 a.m.—American School of the Air: "This Living World" (CBS).

2:00-3:00 p.m.—Music Appreciation Hour. Directed by Walter Damrosch (NBC Blue).

3:45 p.m.—Exploring Space. Stories of the constellations, Maude Bennot, director, Adler Planetarium, Chicago, commentator (CBS).

4:15-4:45 p.m.—University Life (MBS).

9:30-10:00 p.m.—Everyman's Theater. A series of plays written and produced by Arch Oboler (NBC Red).

11:15-11:30 p.m.—The Story Behind the Headlines. Produced in cooperation with the American Historical Association. Cesar Saerchinger, commentator (NBC Red).

11:30-12:00 midnight — Unlimited Horizons. Produced in cooperation with the University of California, Stanford University and the California Institute of Technology. Dramas and discussions of the physical sciences (NBC Blue).

Saturdays

11:05 a.m.—Philharmonic-Symphony Young People's Concert. Rudolph Ganz, conductor (CBS).

12:30 p.m.—Let's Pretend. Dramatic adaptations of fairy tales and original fantasies by Nila Mack. Enacted by Junior Stock Company (CBS).

12:00 noon-12:25 p.m. — American Education Forum. Designed to interest laymen as well as educators (NBC Blue).

12:00 noon-12:30 p.m.—Milestones in the History of Music. Produced by Eastman School of Music (NBC Red).

1:00-1:15 p.m.—This Wonderful World (MBS).

1:00-1:15 p.m.—Of Men and Books. Reviews of books and discussions of authors by Prof. John T. Frederick, Northwestern University (CBS).

1:15 p.m.—Highways to Health. Medical talks for the layman, arranged by the New York Academy of Medicine (CBS).

2:00-5:00 p.m.—Metropolitan Opera (NBC Blue).

5:00-5:30 p.m.—The World Is Yours. Produced in cooperation with the U. S. Office of Education and the Smithsonian Institution (NBC Red).

7:00 p.m.—People's Platform. Round table discussion of social, economic and political problems, Lyman Bryson, chairman (CBS).

7:30-8:00 p.m.—Listener's Playhouse. A series devoted to new radio writing and experimental production technics (NBC Blue).

8:15-8:30 p.m.—Man and the World. Produced in cooperation with the Chicago Museum of Science and Industry and the American Museum of Natural History of New York. A new series devoted to the men of science and their achievements (NBC Blue).

8:30 p.m.—The Human Adventure. Dramatizations of outstanding cultural and intellectual contributions of leading universities through the world. Presented by the University of Chicago and CBS.

9:35-11:00 p.m.—NBC Symphony Orchestra (NBC Blue).

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[1]Except Sunday.

[2]The American School of the Air will be broadcast over the Columbia Broadcasting System stations from 9:15 to 9:45 a.m. E.S.T.; 2:30-2:55 p.m.; C.S.T.; 9:30-10:00 a.m., M.S.T., and 2:00-2:30 p.m., P.S.T.

PUBLICATIONS

Teachers' Anthology

Because many of the poetry manuscripts received by Harbinger House, New York publisher, are by teachers, the firm is planning to issue an anthology of poetry by teachers.

Editors already are at work on the book, which is tentatively scheduled for publication in April. Any teacher, school executive or staff member in any public, parochial or private school in the United States and Canada may submit entries.

TIME AND LABOR INSURANCE

Since the major portion of maintenance costs lies not in the cost of materials but rather in the time and labor necessary to maintain buildings, it is important that the materials selected will produce the desired results easily and efficiently.

Certain jobs require a definite amount of time and labor, yet the results will be only in proportion to the effectiveness of the materials used. Even the most skilled, conscientious custodian cannot produce better results than the materials he is using are able to produce. Better products naturally give better results. To utilize cheap, ineffective materials may actually increase your maintenance costs.

Midland Quality floor seals, finishes, waxes and cleansers, disinfectants, insecticides and other maintenance materials are designed to do a specific job efficiently and satisfactorily and at the same time reduce labor to a minimum. We quote the adage, "A job worth doing is worth doing right." Midland Products will help your custodian do his job right.

We solicit your inquiries on Midland Maintenance Materials and also we extend the services of our Maintenance Materials Division on any problems of maintenance you may have. Midland Service is extended without cost or obligation.

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Poetry intended for the anthology should be addressed to the editor, *Teachers' Anthology,* Harbinger House, 41 West Thirty-Fifth Street, New York, and must be accompanied by return postage.

Bulletins on Subscription Basis

Many administrators have requested that their schools be put on the mailing list for the *Curriculum Bulletin,* a series of units, study guides, bibliographies and other curriculum materials, sponsored by the University of Oregon curriculum laboratory and distributed by the University Cooperative Store. These materials have proved helpful to teachers, both in their classroom and in professional study groups. While many schools purchase only special issues, others wish to have the complete set because of the wide range of interests.

The *Curriculum Bulletin* is stencil duplicated and distributed at cost. Approximately 20 bulletins are planned for 1940-41 with a total list price of not less than $7.50. These may be obtained for $6 on a subscription basis. All those not out of print for 1939-40 may be obtained for $4.25 (total list price, $5.25). Subscriptions and orders for special numbers should be sent to the University Cooperative Store, Eugene, Ore. A complete annotated list of bulletins for 1939-40 and 1940-41 may be obtained from the same source.

Government Aids for Teachers

"New Government Aids for Teachers" is the title of a 24 page publication just issued by the U. S. Office of Education.

Included in the annotated listing are free and low cost books, pamphlets, charts, maps, exhibits, films, slides and other government prepared materials available to teachers and school officials.

Selected aids on more than 500 subjects appear in the list. The bulletin also includes a list of current publications of the U. S. Office of Education, good reference bibliographies, publications of the President's Advisory Committee on Education and price lists of government publications on 46 subjects.

Learning and Forgetting

Basing conclusions on a seven year record of 70 cooperating college graduates, W. S. Learned in the thirty-fifth annual report of the Carnegie Foundation for the Advancement of Teaching contends that knowledge gained in college sticks much longer than is commonly believed.

Mr. Learned gave these 70 graduates the same eight or twelve hour examinations that they took five years before in the foundation's Pennsylvania study. After carefully analyzing the results, Mr. Learned thinks that five years after graduation the men had forgotten a "large portion" of what they had learned in college about foreign literature and mathematics but little of what they had learned about fine arts. The science learned in college sticks longest of all.

He concludes that "the peak of knowledge to which the college brings its students as seniors possesses unexpected persistence and that academic attainment recedes more slowly than many had supposed."

Baltimore Committee Reports

In the spring of 1935 the Baltimore board of superintendents appointed a committee of more than 100 selected individuals to be known as the Committee on Curriculum Revision.

To provide a broad base for the consideration of changes in the courses of study, the committee was made as representative as possible and included teachers, supervisors, principals, directors and superintendents. This committee was assigned the task of surveying and studying the current social and economic scene and of making recommendations for needed changes in the present courses of study. Dr. Herbert B. Bruner, professor of education, Teachers College, Columbia University, was general consultant for curriculum revision.

AUDITORIUM, Terrebonne Parish High School, Houma, La. For correct noise-control, as well as attractive appearance, architects Wogan and Bernard specified J-M Permacoustic here and for cafeteria, typewriting room, music hall and executive offices.

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Correct hearing conditions assured at low cost by the use of J-M Permacoustic on walls and ceiling

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This new-type Johns-Manville noise-control material is ideal for every school or university use. In classrooms, cafeterias, study halls, etc., it adds quiet that helps students concentrate more easily . . . reduces strain on teachers.

Its interesting, stonelike texture harmonizes with almost any decorative scheme. Being a ceramic product, Permacoustic can't rot or burn. Treatments stay attractive . . . need little upkeep. And the low cost of Permacoustic places it well within the reach of every school.

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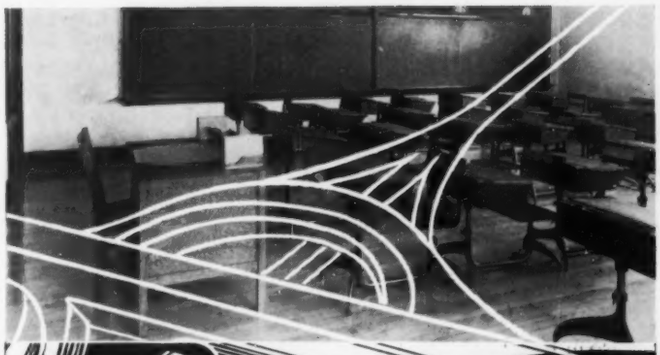
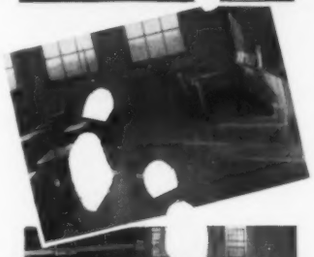


FROM TRAFFIC LANES to SUPER HIGHWAYS with PYRA-SEAL



Unsightly "traffic lanes"—worn bare by the friction of active feet—are disappearing from the nation's schools. They are being replaced by PYRA-SEALed "super highways"—beautiful, lustrous floors that resist wear regardless how fast the pace.

TRAFFIC LANES INVITE FLOOR DECAY - - EXPENSIVE REPLACEMENT

"Traffic Lanes" in floors are danger signals of decay that can occur underneath. Neglect them and you invite expensive floor replacement. The thing to do is to refinish with PYRA-SEAL . . . And on new floors, give them PYRA-SEAL protection right from the start. In either case a PYRA-SEALed floor will end your floor maintenance worries for many years.

PYRA-SEAL is a scientifically prepared floor seal that *seals the pores* in the floor. Not just a "finish," PYRA-SEAL actually *unites* with the wood, bringing out the full rich beauty of the grain and forming a lustrous (yet non-slip) surface that defies age and wear.

Your own comparison will prove that PYRA-SEAL is the most practical and most economical seal for all wood school floors. PYRA-SEAL resists hot and cold water, acids, alkalis, ink, alcohol, etc. Reduces maintenance costs to a minimum. Why not investigate this better floor seal—TODAY?

Approved and recommended by the Maple Flooring Mfrs. Assn., National Oak Flooring Mfrs. Assn., and specified by leading architects.

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Gives complete information on PYRA-SEAL treatment and other Vestal products that save time, money, and labor in floor maintenance. Write for your copy today.

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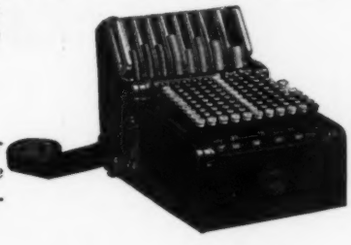

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Detroit Public Library

After five years the committee and its seven subcommittees, each of which was assigned a topic for study, have published their reports, prepared for the guidance of course of study committees.

The seven subcommittee reports concern the following areas:

1. Function and Scope of Public Education in the American Democracy Today.
2. The Effect of Technological Development Upon Society.
3. The Family in Present Day Life.
4. International Problems and Their Import.
5. Attitudes Toward Authority.
6. The Relation of Government to Social Welfare.
7. The Conservation of Natural Resources.

SUMMER COURSES

Curriculum Workshop at Cornell

Prof. M. L. Hulse of the college of education at Cornell University will direct a six weeks' Curriculum Workshop to be held at Ithaca, N. Y., from July 7 to August 15. The workshop is designed for teachers in the elementary and secondary schools. Members of the education and arts staff at Cornell will share with members of the workshop the responsibility for developing projects relating to the teaching of democracy. This theme is stressed because teachers are under pressure to make a greater contribution toward the attainment of this goal. To ensure a realistic approach the Cornell workshop staff is surveying needs of a representative central school in upstate New York. The faculty of this central school will attend the workshop to assist in reorganizing the school curriculum.

VULCAN ECONOMIES IN SCHOOL CAFETERIA KITCHENS

New **Super** Radial-Fin Cook Top saves 20% in top cooking costs

New 2-Compartment Oven does twice as much work on same amount of gas

Oven Heat Control cuts food losses, reduces meat shrinkage (Actual tests show 14 more ¼-lb. servings from 20-lb. roast)

Insulated Ovens save gas, improve working conditions

MEET RISING FOOD BILLS
with lower cooking costs!

How to meet rising costs without sacrificing the quantity or the quality of the food on students' plates—that's the problem confronting every cafeteria director today.

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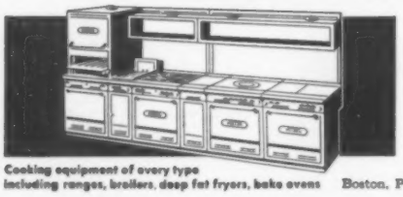

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NAMES IN NEWS

City Superintendents

Supt. S. T. Neveln of Austin, Minn., was the honor guest recently at a banquet celebrating his completion of twenty years of service with the Austin public school system. Attending the event were 200 faculty members, the board of education and members of former boards of education and their wives. Members of the faculty and building force presented Superintendent Neveln with a pocket watch and chain.

Col. R. C. Hall retired on February 1 as superintendent at Little Rock, Ark., a position he has held since 1908. Colonel Hall first became connected with the Little Rock system in 1896 as high school principal. In 1902 he resigned to become commandant of Arkansas Military Academy, returning to the Little Rock schools in 1908 as elementary principal. He will continue as associate superintendent. The new superintendent is Russell T. Scobee, former superintendent at Jefferson City, Mo.

Glenn O. Swing, superintendent at Covington, Ky., for the last fourteen years, has been given a contract for his fifth term in that city.

J. O. Shaw has resigned as superintendent at Frederick, Okla., effective July 1.

Lamar Jenkins has been named superintendent at Coalton, Ohio.

J. C. Hammon recently was elected superintendent of schools at Wagoner, Okla., succeeding R. E. Staffelbach.

Alfred Vaala has been appointed superintendent of schools at Castalia, Iowa, succeeding J. S. Norlie, resigned.

Harold C. Benedict, principal and coach at Lawrenceburg, Ind., has been appointed acting superintendent at Lawrenceburg to fill the vacancy created when Harold C. Crater left to join the National Guard in camp.

W. Burton Patrick, superintendent of schools, Orange, N. J., since 1915, has resigned because of poor health. Howard J. McNaughton, principal of Tre-

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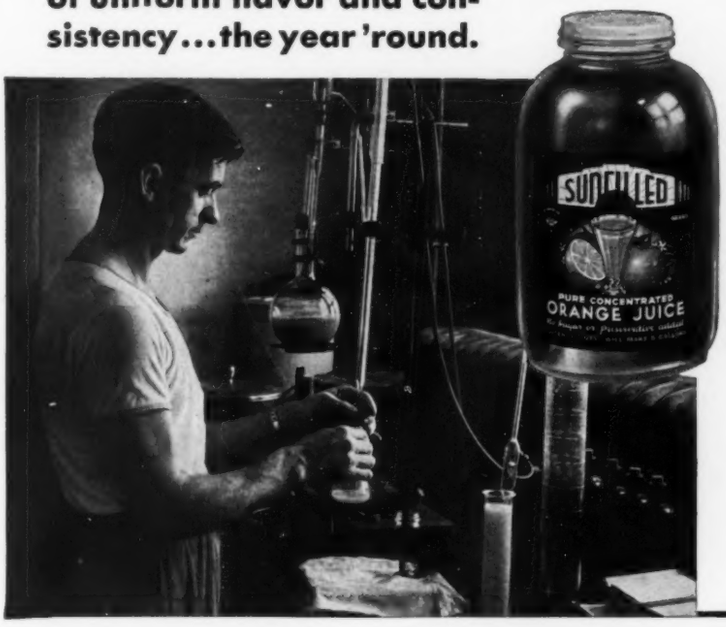
SUNFILLED pure concentrated ORANGE and GRAPEFRUIT JUICES make possible the more economic serving of healthful juices of uniform flavor and consistency...the year 'round.



Experts who know citrus fruits best, have the entire crop yield of Florida from which to select the fruits used in processing SUNFILLED Concentrated Juices. On the basis of wholesome juice values, only the choicest fruits are bought at the proper stage of maturity. Unadulterated SUNFILLED Juices thus represent the tops of the crops.

Within a few hours after picking, purchased fruits are delivered, inspected, assayed and processed at our plant. Fruits of varying sugar-to-acid ratios are conveyed to separate bins so that they may be scientifically blended to produce a degree of uniform flavor and consistency that is relatively constant and delicious.

The flavor, body, nutritive values and vitamin C content of SUNFILLED Orange and Grapefruit Juices, in ready-to-serve form, always approximate that of freshly expressed juices of average high quality fruit. No element or characteristic is lost or modified as a result of our exclusive processing method.

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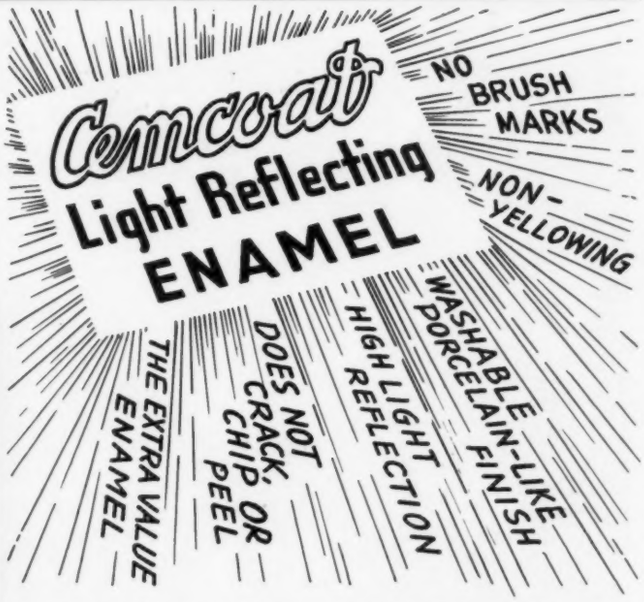

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mont Avenue and Heywood Avenue schools, was named acting superintendent.

H. Burton Stephan, high school principal, Huntington, Ind., is the new superintendent elect in that city.

E. M. Ballengee, principal of the Plainview Junior High School, Plainview, Tex., has been elected superintendent of schools at Miami, Tex., succeeding M. F. Stephens, who resigned.

John E. Holcomb is the new superintendent at Elk City, Okla., succeeding Asa M. Keeth, who resigned. Mr. Holcomb has been the superintendent at Putnam City, Okla.

Dr. Clyde H. O'Dell, who has been in the research department of the Oklahoma state board of education, has been made superintendent at Claremore, Okla., succeeding the late C. P. Crudup.

Floyd Royal, who has been superintendent of school union 117 at Hodgdon, Me., for the last five years, has resigned to become a publisher's representative in the New England States.

State Departments

T. M. Stinnett, director of teacher education and certification in the Arkansas State Department of Education, has been appointed assistant commissioner of education. He will continue to supervise teacher education and certification work.

Ralph B. Jones, junior high school principal, Fort Smith, Ark., has been appointed as commissioner of education for Arkansas, succeeding T. H. Alford.

Principals

Arthur E. Lord has been appointed principal of School 47 in Buffalo, N. Y. He succeeds Benjamin L. Abel, who retired upon completing forty-two years of service in the Buffalo schools.

E. W. Smith, former dean of men at Chapman College, Los Angeles, has been appointed principal of Beaumont Union High School, Beaumont, Calif., succeeding the late Stanley F. Powles.

Joseph Morley, high school faculty member, Arcade, N. Y., has been promoted to the principalship of Central High School, Arcade.

Dr. Robert S. Gilchrist, for five years principal of Greeley Senior High School, Greeley, Colo., has resigned to accept a post as chief of educational relations for the student work section of the N.Y.A. Wendell Blight, who has been vice principal at the high school and boys' counselor, will become acting principal of the high school for the remainder of the school year.

Edgar R. Crozier, who has been high school principal at Brownville, Me., for the last six years, resigned recently to take the principalship of the high school at Stonington, Me. Gordon Raymond, submaster at Brownville Junction, Me., was named his successor.

Luther Harris in his seventh year as principal of Fair Garden School, Knoxville, Tenn., was appointed principal of Christenberry Junior High School.

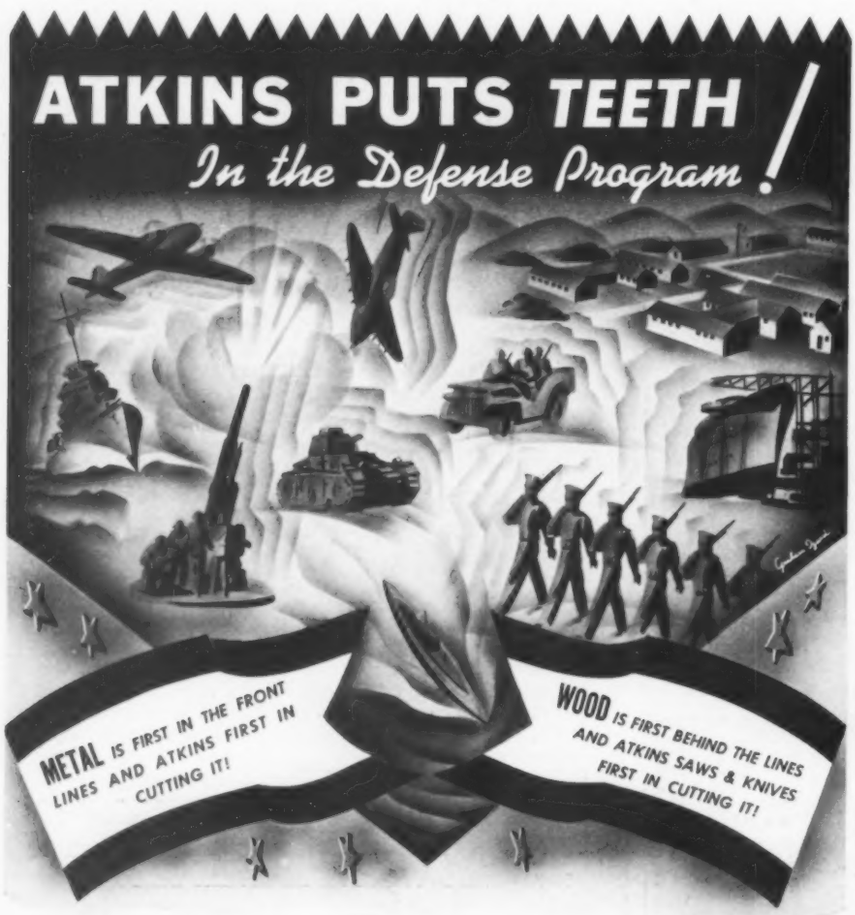
C. B. Stewart, former principal, Stewart High School, Bessemer City, N. C., is now principal of Adkin High School, Kinston, N. C.

In the Colleges

Dr. William Harold Cowley, 41, president of Hamilton College, Clinton, N. Y., last month was chosen president of the University of Minnesota by the unanimous vote of its board of regents. While still an undergraduate at Dartmouth, Cowley conducted a successful campaign to reorganize the college curriculum. He has had a varied career as a newspaperman, personnel consultant and professor of psychology at Ohio State University.

Joseph Brandt, director, Princeton University Press, has been named president of the University of Oklahoma and he will take up his duties there in August 1941.

George H. Deer, State Teachers College, Livingston, Ala., has been appointed principal, Laboratory Schools, Louisiana State University. He succeeds John R.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P-670 Master-keyed Combination Padlock

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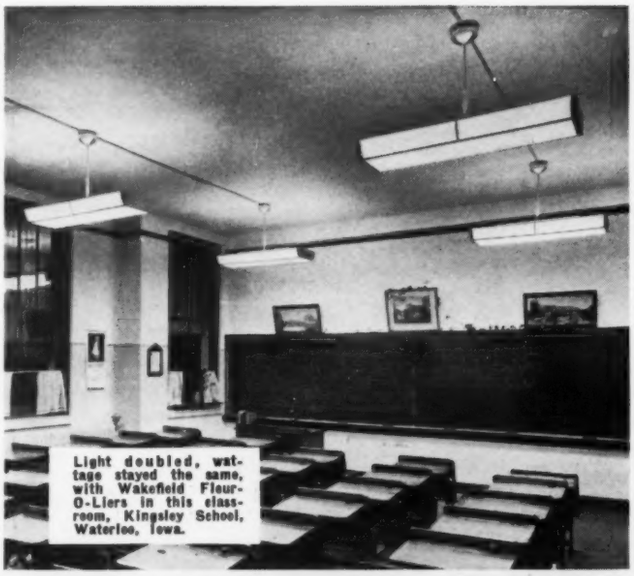

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SHOPTAUGH, who has joined the faculty of the L.S.U. school of education.

REV. CHRISTOPHER O'TOOLE, C.S.C., is the new president of Holy Cross College, Washington, D. C. He succeeds the REV. WILLIAM J. DOHENY, C.S.C.

DR. HOMER HOWARD has resigned from the faculty of the P. K. Yonge Laboratory School, University of Florida, to accept a post at the state teachers' college at Frostburg, Md. He has been succeeded by DR. RUDOLPH LOCKENSGARD of Wittenberg, Wis.

DR. CARL S. ELL has been inaugurated as the second president of Northeastern University, Boston.

W. R. DAVIES, superintendent at Superior, Wis., has been named president of the Eau Claire State Teachers' College at Eau Claire, Wis., succeeding H. A. SCHOFIELD, who has been president of the college since its founding in 1916.

Deaths

DR. MARY SWARTZ ROSE, professor of nutrition at Teachers College, Columbia University, died recently at her home in New Jersey. Doctor Rose, a member of the Teachers College faculty for thirty-five years, was a leading authority in the field of nutrition and the author of many books on dietetics which are included in the bookshelf of every dietitian and cafeteria manager.

J. SHERIDAN LINN, superintendent of schools, Patchogue, N. Y., for twenty-one years, was found dead recently at his home.

J. W. ROGERS, high school principal, El Dorado, Ark., since 1935, died recently. He was a former dean of men at Henderson-Brown College, Arkadelphia, Ark., and superintendent at Smackover, Ark.

REV. MICHAEL A. DRENNAN, C.M., councilor for the eastern province of the Vincentians and former professor of moral theology at St. John's Seminary, Trenton, N. J., died recently at the age of 72 years.

DR. C. W. PUGSLEY, 62, president emeritus of South Dakota State College, Brookings, died recently at Omaha, Neb., where he had been undergoing treatment for a gastric ailment.

CARMON G. ROSS, serving his ninth year as high school principal, Modoc, Ind., died recently at Muncie, Ind., of bronchial pneumonia following a major operation.

DR. C. EDWARD JONES, former superintendent at Albany, N. Y., died recently at his home at Albany.

JOHN S. ANDERSON, superintendent of schools, Henry County, Ohio, was killed recently when the automobile he was driving was struck by a freight train near Defiance, Ohio.

WILLIAM JOHN YOURD, 54, principal of Clinton High School, Clinton, Iowa, for twenty-four years, died recently after a brief illness.

WALTER F. HALL, 53, superintendent of schools, Acton, Mass., died recently.

J. HARRY HOFFMAN, for the last thirty-two years superintendent of schools, Bucks County, Pennsylvania, died recently at the age of 66 years.

ALEXANDER H. MITCHELL, 62, son of the founder and successor as principal of the Mitchell School for Boys, private college preparatory school at Billerica, Mass., died recently.

GILBERT A. WILLIS, superintendent of schools, Kankakee County, Illinois, died recently.

CHARLES E. O'NEILL, assistant superintendent of schools in Brooklyn, N. Y., died recently.

Miscellaneous

ELDON C. GEYER of Battle Creek, Mich., was elected president of the Michigan Association of Public School Business Officials recently. Other officers elected are: H. L. CHAMBERLAIN, Lansing, vice president; FRED SHERK, Grand Rapids, secretary-treasurer; OTTO W. HAISLEY, Ann Arbor, and CHESTER F. MILLER, Saginaw, directors.

DR. HARRY B. SUMMERS, for many years a member of the faculty of Kansas

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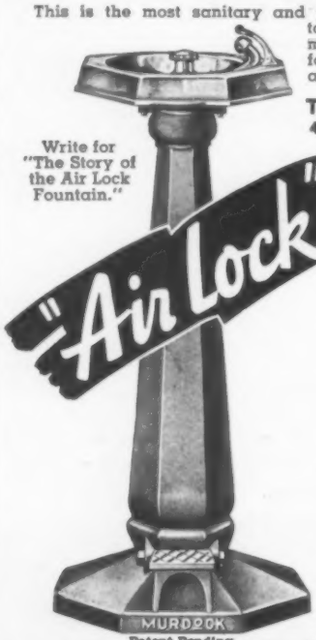

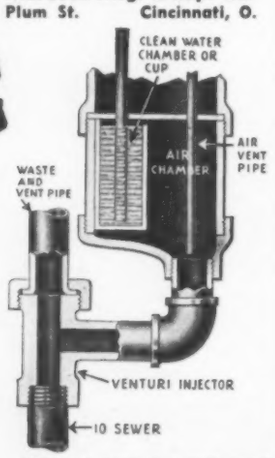

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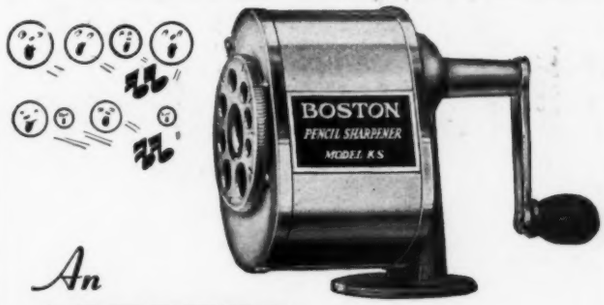

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State College at Manhattan, has been appointed director of the eastern division of the N.B.C. public service division.

Dr. Frank P. R. Van Syckel, for thirty years head of the Columbus Academy, a private institution at Columbus, Ohio, has announced his resignation.

Harriet L. Butler has retired from her position as supervisor of kindergarten-primary grades in the schools of Buffalo, N. Y.

Helen A. Kilpatrick, dietitian, Hamilton High School cafeteria, Trenton, N. J., has been appointed supervisor of all cafeterias in Hamilton township.

Dorothea Behm, formerly cafeteria director at Central High School, Syracuse, N. Y., has been appointed supervisor of cafeterias, Hartford, Conn.

Dr. Anthony E. Karnes, commissioner of education for the Territory of Alaska since March 1, 1933, resigned January 1 to become state director of selective service for Alaska. He was succeeded in the office of the commissioner of education by Dr. James C. Ryan, head of the department of education of the University of Alaska.

Dr. Emery Olson, dean, school of government, University of Southern California, has been appointed part-time consultant on personnel training problems growing out of national defense activities in the U. S. Office of Education.

The Bookshelf

General

We, the Guardians of Our Liberty. *An Account of the American Bill of Rights. By Marguerite Hall Albjerg, Frederick B. Knight and E. J. Woodward. Chicago: Beckley-Cardy Company,* 1940. *Pp.* x+194. $1.20.

If War Comes . . . Mobilizing Machines and Men. *By Percy W. Bidwell. New York: Council on Foreign Relations,* 45 *East Sixty-Fifth Street.* 1940. *Pp.* 32. $0.10 *(Paper Cover).*

Housing America. *A Source Unit for the Social Studies. By John H. Haefner and Others. Washington, D. C.: National Council for the Social Studies,* 1940. *Pp.* 80. *Bulletin No.* 14. $0.50 *(Paper Cover).*

Fish Production. *By Josephine Perry. New York: Longmans, Green and Company,* 1940. *Pp.* 104. $1.50.

The Story of a Dam. *By Geraldine Le May. New York: Longmans, Green and Company,* 1940. *Pp.* 66. $1.50.

Personal Finance Book. *By Rufie Lee Williams and James Mendenhall. Institute for Consumer Education. Columbia, Mo.: Stephens College,* 1940. *Pp.* 96. *Illustrated.* $1 *(Paper Cover).*

The Distant Cousin. *By Dr. M. Gilbert. New York: The Children's Correspondence School,* 1940. *Pp.* 40. $1.60 *(Paper Cover).*

Yukon Holiday. *By Felice Fieldhouse. New York: Longmans, Green and Company,* 1940. *Pp.* 230. $2.

Luck of Scotland. *By Ivy Bolton. New York: Longmans, Green and Company,* 1940. *Pp.* x+229. $2.

Blue Horizon. *By Mary Wolfe Thompson. New York: Longmans, Green and Company,* 1940. *Pp.* x+221. $2.

River Empire. *By Helen Clark Fernald and Edwin M. Slocombe. New York: Longmans, Green and Company,* 1940. *Pp.* vi+218. $2.

Concord's Happy Rebel, Henry David Thoreau. *By Hildegarde Hawthorne. New York: Longmans, Green and Company,* 1940. *Pp.* 191. $2.

One-Act Plays. *By Marie Annette Webb. New York: The Macmillan Company,* 1940. *Pp.* x+443. $1.60.

Stewart Iron and Chain Link Wire Fences protect school children by providing a restraining barrier which keeps activities within safe play areas. A protective Stewart Fence brings peace of mind to officials and parents. Stewart manufactures fence for school grounds, athletic fields, natatoriums, and tennis courts, as well as baseball backstops, iron and wire window guards, and many other metal specialties for school use. Send for illustrated catalog. Please mention items in which you are interested. Sales and Erection offices in principal cities.

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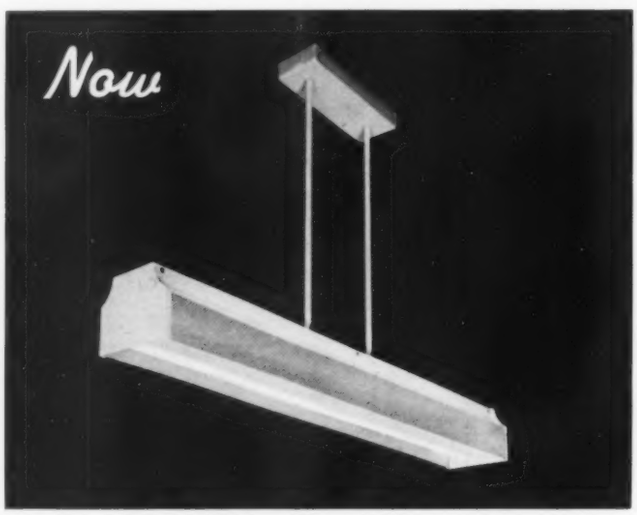

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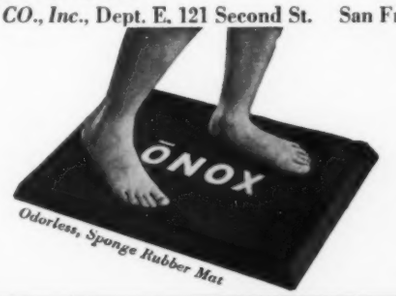

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AMERICA'S CHILDREN. *By Maxwell S. Stewart. New York: Public Affairs Committee, Inc.,* 1940. *Pp.* 31. $0.10 *(Paper Cover).*

QUIZ ON RAILROADS AND RAILROADING. *Published by Association of American Railroads,* 1940. *Washington, D. C. Pp.* 64. *Illustrated. Limited supply free of charge.*

AKKA, DWARF OF SYRACUSE. *By Agnes Carr Vaughan. New York: Longmans, Green and Company,* 1940. *Pp.* viii+216. $2.

EDRA OF THE ISLANDS. *By Marjorie Medary. New York: Longmans, Green and Company,* 1940. *Pp.* 280. $2.

CHUCK MARTINEZ. *By Priscilla Holton. New York: Longmans, Green and Company,* 1940. *Pp.* 312. $2.

Textual

THE SOCIAL STUDIES IN GENERAL EDUCATION. *Report of the Committee on the Function of the Social Studies in General Education for the Commission of Secondary School Curriculum. New York: D. Appleton-Century Company,* 1940. *Pp.* xv+401. $2.75.

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PSYCHOLOGY IN EDUCATION. *By Herbert Sorenson. New York: McGraw-Hill Book Company, Inc.,* 1940. *Pp.* xiv+489. $2.75.

THE AMERICAN EDUCATIONAL SYSTEM. *By John Dale Russell and Charles H. Judd. Boston: Houghton Mifflin Company,* 1940. *Pp.* xvi+554. $2.25.

INTRODUCTION TO COMMUNITY RECREATION. *Prepared for the National Recreation Association. By George D. Butler. New York: McGraw-Hill Book Company, Inc., 1940. Pp.* xiv+547. $3.50.

MAKING CONSUMER EDUCATION EFFECTIVE. *Proceedings of the Second National Conference on Consumer Education Held at Stephens College, Columbia, Mo., April* 1-3, 1940. *Los Angeles: Ward Ritchie Press,* 1940. *Pp.* 253.

THE GRADUATE SCHOOL. *By Byrne J. Horton. New York: New York University Bookstore,* 1940. *Pp.* 182.

THE TECHNICAL SCHOOLS OF NEW ZEALAND. *A Historical Survey. By John Nicol. New Zealand Council for Educational Research,* 1940. *Pp.* xii+250.

SELECTED ITEMS FOR THE TESTING OF STUDY SKILLS. *By Horace T. Morse and George H. McCune. Washington, D. C.: National Council for the Social Studies,* 1940. *Pp.* 72. *Bulletin No.* 15. $0.50 *(Paper Cover).*

INCREASING THE POWER OF THE FEDERAL GOVERNMENT. *Annual Debater's Help Book. Vol. VII. Edited by E. C. Buehler. New York: Noble and Noble,* 1940. *Pp.* vii+382. $2.

INTERCOLLEGIATE DEBATES. *Year Book of College Debating. Edited by Egbert Ray Nichols. New York: Noble & Noble, Publishers, Inc.,* 1940. *Pp.* x+411. $2.50.

TEACHER TEAMWORK WITH A PROBLEM PUBLIC. *By C. R. Van Nice. Topeka, Kan.: School Activities Publishing Company,* 1940. *Pp.* ix+164.

UNITS IN SAFETY EDUCATION. *Grades* 1 *and* 2; *Grades* 3 *and* 4; *Grades* 5 *and* 6. *Washington, D. C.: National Education Association,* 1940. $0.25 *each (Paper Cover).*

A FIRST COURSE IN THE STUDY OF EDUCATION. *A Humanistic Approach. By Edgar C. Higbie. Chicago: Benjamin H. Sanborn & Company,* 1940. *Pp.* xvi+392.

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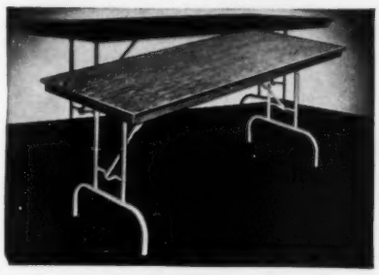

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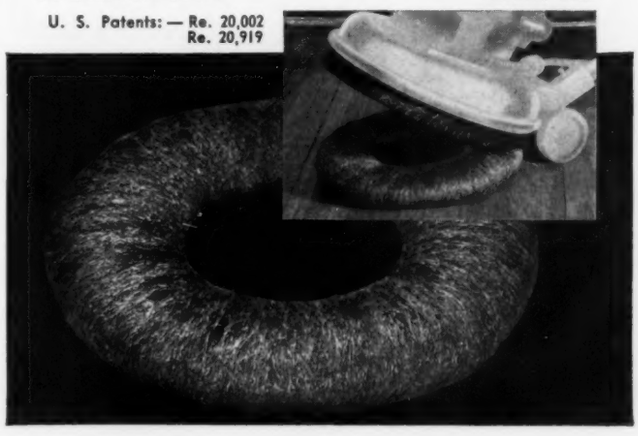

Trade News

Elementary Science Units

Two distinctly new items were shown for the first time at the A.A.S.A. convention by the Chicago Apparatus Company, 1735 North Ashland Avenue, Chicago, manufacturers of scientific instruments and supplies for laboratories.

Rock and mineral charts to supplement visually that part of general and fundamental science courses dealing with the chemical and mineral resources of the earth were displayed.

Also, the Baker elementary science units were on display, including the apparatus and a printed complete guide to the educational procedures for each science. The apparatus for each of the units comes in a neat storage box. The units offer an easy and economical means of presenting science in the elementary grades.

Folding Stage Is Convertible

Now the new combination Mitchell folding stage, a product of Mitchell Manufacturing Company, 1560 Forest Home Avenue, Milwaukee, can be used for bands, orchestras and standing or seated choral groups by use of conversion features developed during the last year. By a clever rearrangement of units of the folding stage, the risers can be made wide enough for an orchestra or seated chorus and later changed to narrow risers to accommodate a standing group.

These units are each of a size convenient for setting up or taking down or for moving from one room to another. They can be easily transported for road concerts. Another feature of these units is that they can be converted into tables of regulation height and used for banquets. This equipment was on display at the A.A.S.A. convention. Mitchell products include playground and swimming pool equipment and Fold-O-Leg tables.

Science Equipment Displayed

Sample pieces of equipment from the new Hamilton all-purpose science equipment line were displayed at the A.A.S.A. convention by the Hamilton Manufacturing Company, Two Rivers, Wis. This type of science equipment is designed for use in any science or for agricultural training. The fact that the equipment is in use several periods a day makes it a practical buy for high schools whose enrollment is not large enough to warrant separate rooms for each of the sciences.

Three New Time Units

The Standard Electric Time Company, Springfield, Mass., displayed at the convention a new type of bell of the underdome style with several improved mechanical and electrical features. Also shown were an improved type of all metal program clock, which eliminates considerable mechanism, and a new type of dead front bell board to be used in connection with the program clock for the transfer of program signals from one schedule to another quickly and easily.

New Catalogs

Tile-Tex Company, Chicago Heights, Ill.: New catalogs describing and illustrating the three principal Tile-Tex products.

American Seating Company, Grand Rapids, Mich.: Seating for American Schools, School Furniture Catalog No. 304.

Fred Medart Manufacturing Company, St. Louis: "Now About This Business of National Preparedness."

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Safe, roomy platform allows for tools and supplies
Standard non-skid safety shoes at no extra cost

Dayton Safety Ladders eliminate expensive delays caused by ordinary ladders. Men work faster, with more confidence, on the broad, firm platforms of Daytons. Rigid steel supports, tested airplane spruce give Dayton Safety Ladders strength, stability, and lightness of weight. Write for prices and catalog.

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Install these safety shoes on your present straight ladders for additional safety. This Dayton Universal Safety Shoe prevents slipping. Your choice of renewable treads including Rubber Suction Grip, Neopreme Suction Grip, or Suberac Cork. Shoe is instantly converted for either inside use of treads or outdoor use of tempered steel spike toe.

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Side Glances—

LIFE is much happier in our publishing offices these days. Ten years ago we moved into a smartly designed Chicago skyscraper with the latest in lighting equipment. But the years we had spent in poorly lighted schoolrooms and in home study under not too favorable conditions, followed by more years of close work with manuscripts and galley proofs, had heaped more abuse on the mechanism of the eye than it could tolerate without strong protest. A few weeks ago our ten year old lighting fixtures were ripped out and were replaced by a modern lighting installation with a greatly increased wattage. Late afternoon headaches have disappeared and we are reveling in the 25 foot candles now provided us.

This summer many school systems will modernize their lighting equipment. To make the job easier for them we shall present next month a portfolio on school lighting. How badly improved lighting is needed is indicated by the rejections of draftees by Army boards. Twenty-two per cent of the candidates rejected by the Army have poor vision, the highest total of rejections for any condition with the exception of bad teeth. How much of this is due to bad schoolroom lighting we would prefer not to know.

WE ALSO commend to your attention in the May issue two human documents: "Upon Retiring Gracefully," by James H. Harris, superintendent emeritus, Pontiac, Mich., and "The Schoolmaster's Wife—An Administrator Without Portfolio," by Kenneth C. Coulter, supervising principal at Jamesburg, N. J.

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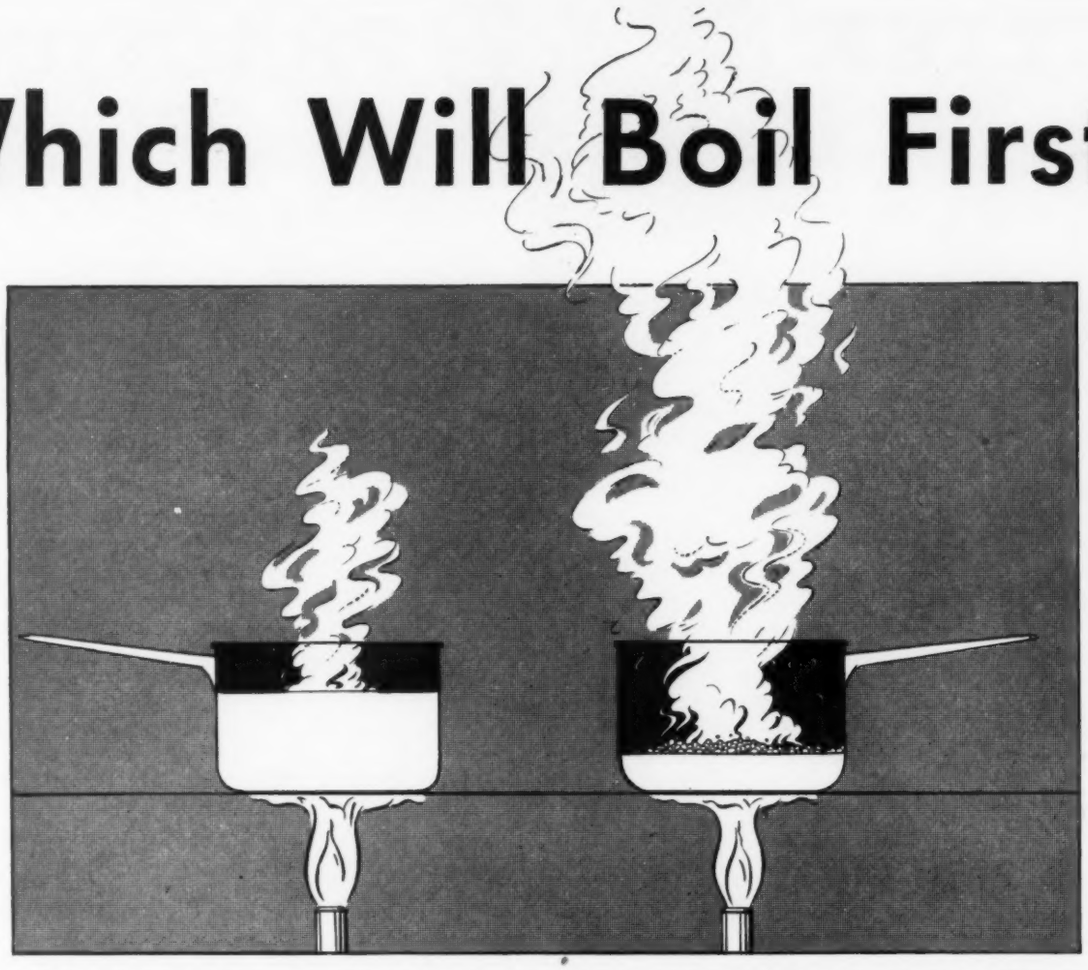

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PACIFIC

STEEL HEATING BOILERS

DIVISION OF UNITED STATES RADIATOR CORPORATION, DETROIT, MICH.

BETTER PLANT PRACTICES

What Price School Supplies?

"The buyer of school supplies and equipment is now faced with the Solomon-like problem of anticipating an adequate supply without superfluous stocking."

This thought expressed by James F. Williams, purchasing agent, School District of Philadelphia, is typical of the attitude of school business officials throughout the country. Prices which already have advanced appreciably within recent months have continued to rise. Tools, machines and other steel products may become more difficult to obtain but if the present condition continues long enough there will scarcely be an item that cannot be obtained from domestic sources. Such is the feeling that exists today.

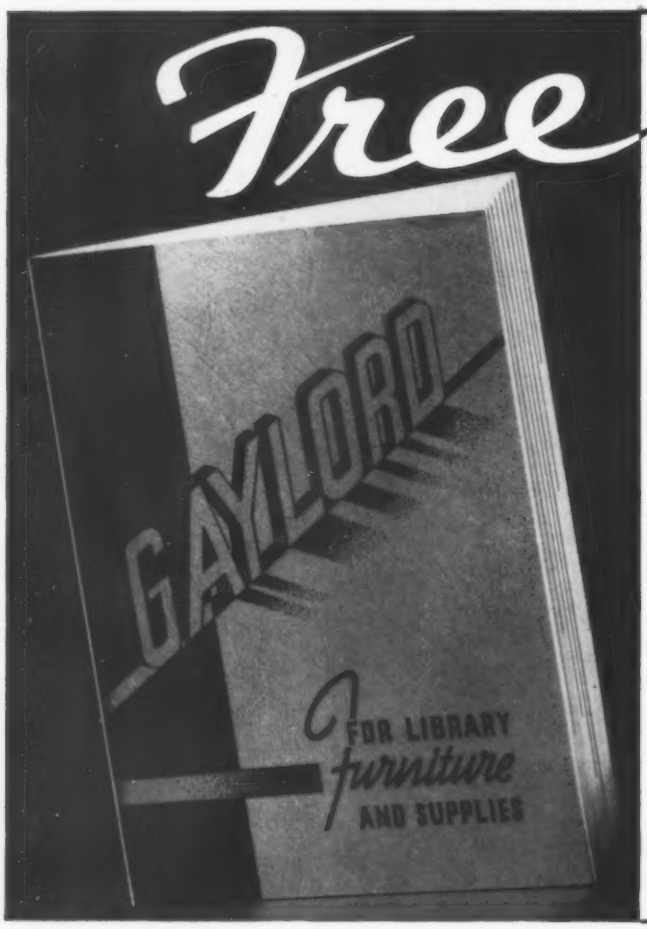
Higher Prices Inevitable

Mr. Williams proceeds to tell us that there is no question that the demands for those materials that are of primary importance in the national defense program are directly affecting deliveries to school consumers. "This," he states, "is of immediate concern to users of machine tools, hardware, lumber, metals and those supplies that are needed in vocational or maintenance shops.

"The chief modification in the general procurement stipulations, which are designed to achieve the perfect situation for which every buyer strives, *i.e.* to have materials available as they are required in the processing of raw materials to a finished product, is not a physical change of specification wording but rather a firm determination on the part of the consumer adequately to anticipate his requirements. This would go far toward ensuring contracts being filled on time. If a manufacturer's stock is depleted, the distributor cannot accelerate delivery in spite of any adjectives written into a contract.

"Another modification would be to employ substitute materials for those regularly used in classroom procedure. This may not be entirely satisfactory, as the processes of industry that classroom practice attempts to simulate may become too distant from school practice to be of benefit to the pupil. Substitution may not, however, be too difficult or novel an idea to entertain, as many manufacturers will be forced to the same arrangement in attempting to procure imported raw materials that enter into the finished product. The final decision will have to be based upon the availability and the necessity for obtaining the particular item.

"There are few major school supply items that cannot today be obtained from a domestic source. In some cases a slight increase in price may result when the foreign item is eliminated, but this should be of no serious concern to



to School Librarians and Superintendents...

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buyers who are spending dollars derived from taxation of American homes and industries. There could be no better time than the present for school buyers to free themselves from dependency upon merchandise imported from Asia and Europe.

"Prices will probably continue to advance for materials that are in demand in those countries that have been customers of nations now at war. This fact, together with the abnormal requirements of home industries manufacturing for national defense, will affect the price structure for all buyers. The limits to which this may extend will depend largely upon the production capacity of the supplying industry.

"With paper, for example, there has been a substantial increase late in 1939 and early in 1940 which has in the past few months, as production expanded, tapered off again. The net result, however, will be higher unit costs for most items compared to what have been paid in the last three or four years. Obviously, this situation will continue so long as the demand runs ahead of the supply."

Covering for the Future

When we discussed the situation with Joseph L. Ernst, purchasing agent, board of education, Rochester, N. Y., he had been ordered to active duty as a major in the Quartermaster Corps. Today he may feel differently, but before he reported to the Army Industrial College in Washington he told us that in several instances they had left out of proposals and specifications any definite delivery date.

"This applies particularly to such items as machine tools, small tools, items of paper and other miscellaneous supplies and equipment that are becoming more difficult to obtain," he said. "In a recent bid on machine tools we obtained promise of delivery in August 1941. The items that we have had most difficulty in obtaining are small machinist tools, such as micrometers, high speed tool bits, paint brushes, drafting sets and some items of paper and cloth.

"If the present condition lasts long enough I doubt if there will be a single item that cannot be obtained from some domestic source. As an illustration, we have always obtained foreign-made drafting sets but because of the shortage of foreign-made goods our two last orders were for domestically manufactured products. While we are not as yet convinced that the domestic sets are as well made as the old German sets, certainly with additional experience our manufacturers will be able to turn out a very satisfactory product. Substitutes are being offered in place of hair for brushes. This may be a solution to the brush problem.

"While it is no doubt an established fact that the government will watch prices, it would seem reasonable to expect that such items as small machinist tools, machine tools and other products of steel will have a moderate rise at least. The same condition probably holds for materials made of paper, wool and copper. It would seem a wise policy to cover for as long a period as possible."

Clearer Specifications Needed

"Clearer specifications are always necessary if we are to obtain the supplies desired at the minimum cost," A. P. Mattier, business manager, Compton Union Secondary School District, Compton, Calif., points out. He believes that many chemicals that are now used in the manufacture of explosives will be difficult to procure if the war continues. Metal goods will, no doubt, advance in price and there will be a shortage in many other items.

"Bentwood chairs," he says, "cannot be obtained from domestic sources and probably many other items used by the school departments. I think prices generally will advance, particularly on paper goods and metal products."

Typifying the **MODERN TREND** *in Education*

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LOOKING FORWARD

Democracy

DURING the past few years a number of fascist-minded professional propagandists of special interest groups have frequently stated that the United States is a republic and not a democracy. These people hold that the term "democracy" is of recent and presumably doubtful coinage. In their opinion the forefathers did not conceive of this country as a democracy. However, the "Dictionary of the American Language," prepared and published at the University of Chicago, gives the following quotation to show that the word "democratic" was used in this country as early as 1647, when the Rhode Island *Colonial Record* stated:

"It is agreed . . . that the forme of Government established in Providence Plantations is Democraticall; that is to say, a Government held by ye free and voluntarie consent of all, or the greater parte of the free inhabitants."

Work Camps

ONE of the serious problems faced by each generation is the transition of youth from training agencies to active participation in the economic life of the nation. This natural problem has been gravely aggravated by the long extended depression and will probably become even more fraught with difficulties during the reconstruction period following the present emergency. Only insofar as economic and social stresses bring these difficulties into greater prominence should this general problem be considered as part of a depression.

Difficulties in the process of inducting youth into industry have increased ever since the World War. Our changing technology with its progressively greater specialization and with the apparent inability of institutions and agencies to adjust quickly to these changes is primarily responsible. One of these agencies is the school. In many respects the school has been aloof from actual life and unwilling to recognize its own limitations. Possibly the educator has viewed the school as a complete agency and has neglected the rich fields for cooperation with other agencies.

As a result of much publicity, this problem has crystallized itself in the minds of many as the urgent need to provide satisfactory work experiences for youth either during or immediately after leaving secondary school. Certain specialized and collateral discussion is concerned with the "softness" that allegedly grows out of current education; it is said there is no opportunity for "the hardening of youth." So far there is no evidence to support these statements! The discussion of the last five years has now resolved into the declaration that "something must be done about it." Various methods and panaceas have been suggested by politicians, sociologists, educators and laymen.

Two major solutions have been proposed. The first is to recognize the continuing importance of educational work experiences and to provide for them by the democratic method. The primary responsibility for bridging the gap between school and work lies with the community just as it always has. Youth is growing up within our communities under normal environmental conditions in which school, social and work opportunities may be progressively gained as need develops. Home, church, school and industry operate here in their normal relationships. The recognition by the community of the need for work experience may produce a rational organization of all community agencies for the continuing solution of this vital youth problem. Community resources may be pooled, each contributing within the confines of its purpose. Economic organization has just as much responsibility for youth as have home, church and school. Within such a community pattern, youth may be offered opportunity to test different types of work and to make life choices in light of his experience, interests and abilities. These "tryouts" or "apprentice" experiences may be just as valuable as his general education but certainly not more valuable. They merely complement each other.

The advantages are that youth remains within his normal environment and develops competency through experiences closely attuned to that environment. Home, school and church maintain their natural guidance over the immature. The community demonstrates its competence by meeting its normal responsibilities. It is the democratic way. Many communities already are experimenting with considerable success through sensible institutional and agency cooperation.

The second major solution is the so-called work camp, one of the highly publicized devices of the total-

itarian states. This plan calls for the separation of both boys and girls from their natural environment with placement in national or state camps in which certain vocational activities and work experiences are provided. Even the best of these camps offer a limited cultural environment. The degree of regimentation and of complete control of the individual varies with camp policy. In the United States, the experimental C.C.C. camps probably have operated with a minimum of leveling while those of Germany and Italy have resorted to total control and total indoctrination. From available evidence, it is doubtful whether either type of camp will produce the powers, attitudes, ideals and self-sufficiency that a democratic culture requires of its citizens. Regardless of Mrs. Eleanor Roosevelt's belief, neither the work camp nor the military camp can be considered the equivalent for producing democratic competency of a year's training in a good secondary school or university.

The camps lend themselves to much greater dramatization than the continuing but little publicized activities within the community pattern and, hence, their popular appeal is probably greater. They also lend themselves much more easily to propagandistic effort and ultimately to total indoctrination.

While we are bending every effort to provide total defense for the preservation of our democratic way of life, there is a dangerous eagerness on the part of many Washington bureaucrats to accept too many totalitarian practices without deep examination. Several governmental agencies are now toying experimentally with the idea of "enlarging their defense contribution" by fathering work camps. This uncritical tendency is also noticeable among certain educators. The general assumption appears to be that if Hitler did it, maybe we should do it too. It is to be hoped that our school and community leaders will bestir themselves before foreign regimented practices become a part of our lives. American communities are competent to solve the youth work problem in accordance with democratic principles.

Self-Government

IN A recent monograph entitled "Student Cooperation," Prof. Earl C. Kelley, Wayne University, makes a clear-cut analysis of the trends toward pupil participation in secondary school government as a means of teaching democracy more effectively. His conclusions may be summed up in one significant paragraph well worth consideration by secondary school teachers and administrators. He states:

"Because, educationally at least, we have never really tried democracy, our youths do not understand it and have no feeling for it; they are impatient with the slow process of mutual consultation and they yearn for the security of autocracy. This is the preparation we have given the people who might have to go out to fight and to die for democracy."

We are not in complete agreement with Doctor Kelley's sweeping generalization but we do believe that it contains sufficient truth to merit serious study. If the schools are to meet their responsibilities as the continuing first internal line of defense for the democratic way of life and to meet these responsibilities more effectively, they must practice in actual organization what they glibly preach in the classroom.

Unlock the Doors

A VISIT to two large urban schools and one small city school within the past month disclosed administrative practices dangerous to safety of life.

In the first school 1200 pupils were gathered in the auditorium. Four of the six exits were locked. It took the principal five minutes to find someone who had a key after this condition had been called to his attention. The blame was placed upon an overzealous teacher who did not wish to lose a pupil during assembly! To satisfy a silly notion concerning discipline, this school risked the lives of more than 1000 pupils.

In the second building, having a pupil capacity of 1500, the left half of every one of the six outside exits was securely locked. Keeping both sections of the door open annoyed the janitor! In the third building the bars on the safety bolts were encircled by a heavy log chain and were padlocked. The excuse was that occasionally a venturesome lad left the school without permission and the neighbors immediately sounded off on the laxity of school discipline. To protect himself against criticism of this type, the principal locked 500 children in the building every day. Incidentally, the boiler installation was within the building shell.

Safety of child life is much more important than petty administrative regulations. No school was ever designed that could keep all of the pupils within its walls if they desired to leave. Locking or obstructing exits is not only illegal and dangerous but positively criminal. Unlock every outside exit and keep it unlocked. The schools cannot afford tragedies resulting from this type of carelessness.

Error Becomes Usage

AN UNOBSERVED typographical error sometimes produces a new descriptive classification that is carried on indefinitely in practice. John W. Lewis of Baltimore offers the following illustration:

Some years ago he noticed the term "dutch molding" in school plant specifications. He carefully checked the item on completed jobs and found that it was a molding used to frame ducts. Becoming curious about its origin, he traced it back many years to an error in typing when the word "dutch" had been substituted

for "duct." Undetected by the specification writer or the proofreader, the item was recopied as "dutch molding" in subsequent specifications. So firmly did the word take root in Maryland building specifications that architects use it generally and contractors consider it a satisfactory description of a type, blithely unconscious of perpetuation in standard usage of a simple clerical error.

Bill 1074

THE Schwert Bill (H.R. 10606), introduced into the seventy-sixth Congress and commented upon in the February issue of The NATION'S SCHOOLS, has been reintroduced into the seventy-seventh Congress as H.R. 1074 in somewhat modified form as a result of suggestions and criticisms made by individuals and organizations.

The principal changes are those of clarification and presumptive strengthening of state and local controls. The section on camping was modified to overcome the fear that this provision marked the beginning of "work camps." This bill would still introduce work camps to the American scene. It is also doubtful whether camping should be considered solely a school activity. The school health service and examination features have been eliminated. This deletion is also sensible since health service is decidedly not a school responsibility. The total appropriations of $200,000,000 by the end of 1945, as well as the 25 per cent matching feature, have been retained. The provisions of the bill are naturally permissive at the pleasure of the individual states. It is difficult, however, to see how any state would refuse money on this basis regardless of the implications of ultimate controls.

Our opinion of this bill as expressed in the February editorial is unchanged. The statement that "the provisions of this act therefore shall be so construed as to maintain local and state initiative and responsibility—*insofar as consistent with the purposes for which funds are made available under this Act*—gives too much discretionary power to the United States commissioner of education. His power to review plans and to "suggest changes" is similar to that granted under the Smith-Hughes and George-Deen acts and this power has resulted in complete control by the federal office of program, methods, personnel, size of classes and even style of equipment. It is doubtful whether this bill, except in the minds of its promoters, can be considered as a "national preparedness act." It is still a dangerous bill in terms of extension of federal control over a vital part of the instructional program. Any bill that promotes a single curricular activity at the expense of another is dangerous. The American Camping Association and the National Congress of Parents and Teachers have refused to support the bill. The National Education Association, parent body of the American Association for Health, Physical Education and Recreation, has taken no action. The Schwert Bill deserves quiet burial in the committee archives.

Speaking of Youth Again

EACH generation views its successors with alarm. Times are not what they used to be! Youth is soft and decadent! Pedagogic method has gone or is rapidly going to the "demnition bow-wows"! Radical thought is undermining the superstructure erected by the forefathers and so on ad infinitum and ad nauseam. Unfortunately, hardening of the arteries appears to affect society as well as the individual. Let us turn back a few generations to the 1860s when John Stuart Mill opined in his autobiography that:

"I do not believe that boys can be induced to apply themselves with vigor and, what is much more difficult, perseverance, to dry and irksome studies by the sole force of persuasion and soft words. Much must be done, and much must be learned by children for which rigid discipline and known liability to punishment are indispensable as means. It is, no doubt, a very laudable effort in modern teaching to render as much as possible of what the young are required to learn easy and interesting to them. But when this principle is pushed to the length of not requiring them to learn anything but what has been made easy and interesting, one of the chief objects of education is sacrificed. I rejoice in the decline of the old brutal and tyrannical system, which, however, did succeed in enforcing habits of application; but the new, as it seems to me, is training up a race of men who will be incapable of doing anything which is disagreeable to them."

We have buried John Stuart Mill's generation. Its successors who, according to their forebears, "will be incapable of doing anything which is disagreeable to them" are now engaged in making similar postulations and assumptions for their offspring. And youth, today as in the past, does not bother to answer its elders or calm their fears. Youth marches on.

Radio in Education

A HIGHLY informative and valuable symposium entitled "Radio and the Classroom" has been produced by the Department of Elementary School Principals; the study is significant not only to elementary but to secondary school teachers as well. It is simply written and brings together in sensible organization a volume of material relating to this latest agency of communication. It is a good 75 cent investment and copies may be obtained from the National Education Association.

The Editor

A Commencement Designed

THERE is enough hot air in the form of advice dispersed every June by ponderous commencement orators, ostensibly addressing themselves to secondary school graduates, to turn the wheels of American industry, even as it prepares for national defense, for at least the next ten years.

Here's just one illustration. In one small section of populous, industrial eastern Pennsylvania, newspaper accounts of high school commencement exercises in 44 separate communities were examined briefly. The formulas for 90 per cent of the programs were of the following types:

1. Employ as an outside speaker a college professor, a lawyer, a politician, a business man or a professional lecturer. The largest secondary school of the group had a graduating class of 900 boys and girls. The speaker was a lecturer currently active in the National Association of Manufacturers. The smallest high school heard an "inspiring challenge" from a local judge. These two instances illustrate the ease with which the first formula can be adapted to any school, regardless of size.

2. Commission the class honor pupils to hold forth for ten or twelve minutes each on a faculty arranged symposium subject, such as "Idealism in America," "Economic America at the Crossroads" or "How Our School Taught the Democratic Way of Life." I need not comment upon the ease with which this sort of commencement framework presents itself to any school. Its widespread use during the last decade indicates that schoolmen have seized upon it because it made at least a half-hearted show of socializing and democratizing commencement activities to the public.

3. Stage a pageant. This production, with graduates as players, can depict anything from the "Spirit of Liberty" to "The Growth of Transportation." Pageants were produced by only four of the schools examined but the program type is strong enough to be included here.

Symbolic of the program for the senior high school commencement exercises at Coopersburg, Pa., last June is this picture, "Youth Faces the Future." This photograph of two members of the senior class was used on the cover of the printed program to portray the theme of the 1940 commencement.

Essentially, school administrators and supervisors in secondary schools have regarded commencement exercises in two lights. Primarily, they have regarded them as excellent vehicles for interpreting the public schools to their public. Secondarily, they have felt the need to have some successful civic or professional speaker hammer home the eternal verities toward which the character education program of the school has been bent for these many years. The bigger the "name" speaker, the greater is the reflected glory of the school's administration. Then, too, it is a significant admission, if a "name" speaker is called for on the program, that such an educational device is being reserved for an atmosphere entirely beyond the classroom walls.

Parenthetically, the platoon school brought about a reevaluation of the educational values inherent in the assembly program of the high school. It is only one step farther in the same direction when the final public appearance of an outgoing class is made an outgrowth of the same philosophy instead of the imitative, ostentatious thing it has been in the past.

From such ideas grew an experiment with a new form of commencement program in small, rural Coopersburg Junior-Senior High School last June.

The foregoing impressions were shared jointly by a social studies teacher, William J. Warner, and me. Like other members of the school's small teaching staff, Warner is typical of the new generation of teachers who are anxious to throw off the dead hand of cautious practice as they have known it within their own experiences.

Following many heated discussions, we finally came to agree on the following statements on current practices in secondary school commencements:

Inspirational types of commencements are like shots of adrenalin. Their educational values do not last. They concern themselves with what

to Interpret the Pupil

THOMAS W. WATKINS

Supervising Principal, Coopersburg, Pa.

the speaker thinks the graduates need, not with what the graduates know they want.

Pageantry in the commencement may be good public relations but most blasé seniors regard exercises of that sort as being in the elementary school tradition.

Commencement planners too often place emphasis upon the work and ideas of only the small, upper I.Q. section of the graduating class. The typical membership remains little but a body of sticks, clothed in caps and gowns and awaiting their turn to march forward for a diploma.

Commencements could better be a clearing house or roundup for the myriad thoughts and ideas that course through the minds of seniors as they finally realize that they will shortly "feel lost" without the school routine they have known for twelve brief years.

Commencements should aim at interpreting the child, rather than the school, to the public. If school administrators could digest that thought and then apply it, there would be less moaning about tax collections or the thoughtlessness of the public. In interpreting the school to the public, administrators are dealing with an institution. Yet the flavor, the purpose and the life of that institution come from its individual children. In short, we have been engaged in interpreting our own ideas, our plans, our schemes and our innovations rather than in centering our programs upon our wards.

It is admitted these impressions are not of a statistical nature, yet they went into the blueprint for a new type of commencement in our own secondary school in 1940.

Here's a rough sketch of that blueprint.

1. Use class time for the seniors to consider by a socialized procedure the program of action each has in mind for the days that follow graduation. From these will stem questions, doubts and uncertainties.

2. Capitalize on these waverings by promoting self-analysis. Let the class chew over some such test as the California Test of Personality. Probe into individual reactions in informal chats in the classroom after school, on the athletic field, in the gymnasium, at dances and on the street.

3. Boil down each pupil's personal questions to a single, all-inclusive problem, phrased by the pupil himself.

4. Analyze the problems. Classify them by types. Into what general fields of human endeavor do they fall?

Graduation Orator Lets Self Open; Girl Beards Lion, Gets Job

Coopersburg's High school clinical commencement, Friday evening, has already landed a job for one of its commercial graduates.

Dr. Harold P. Thomas, William D. Reimert and Rev. F. P. Stocker, the three "experts" who sat with the class and discussed the seniors' personal problems for the future, were in agreement that sometimes a job-seeker must work without pay to make a favorable impression upon a prospective employer.

When the program was completed, the class salutatorian, Irma Schleifer, bluntly asked for a payless secretarial job from Dr. Thomas, Lehigh university's summer session director.

"I'll do more than that, Irma," the educator replied.

"You already have a job, with pay, for exactly one week, in my department. To claim the job you must do three things: write me a personal letter of application; call me by 'phone for an appointment; and finally, submit to a personal interview."

5. Now, and only now, allow the class to proceed with planning a clinical discussion of its problems with youth-minded men at a commencement program that will be nothing more than another classroom technic.

6. Obtain young men from the fields represented in the problem types. Have them sit with the graduates in a round table discussion at commencement. Furnish them beforehand with all pertinent information about each class member who is to take part in the talkfest.

7. Then, without rehearsal, let the graduates, their teachers and the outsiders hash over the problems, letting the chips fall where they may.

Caution: The chairman of the group should be a true spark plug. He should be a man of vibrant personality, infinite understanding of young people and naturally able to get argument started without giving a speech himself.

Coopersburg's secondary school followed that blueprint. Pupil problems resolved themselves into types falling within the areas of educational, vocational and moral questions. Three men were chosen from those three fields.

Dr. Harold P. Thomas, head of Lehigh University's department of education, director of its summer session and former director of guidance and research in the public schools of Springfield, Mass., was agreed upon as the best available clinic leader.

William D. Reimert, executive editor of the *Call-Chronicle,* Allentown, Pa., was selected to bring into the discussions the point of view of a man who has hundreds of employes as his industrial responsibility.

Rev. F. P. Stocker, president of the district executive board of the Moravian Church in America, consented to give the religious and moral slant on the pupils' questions.

All three of these men were well on the younger side of 40. Significant, too, was the fact that each man immediately consented to try his hand in the experiment, foregoing the usual honorarium.

The mechanics of the program itself were simple. Doctor Thomas presented an overview of youth problems in their national scope, making frequent reference to youth studies, such as the one made in Maryland under the American Council on Education.

A member of the class, chosen by fellow members, did the same thing for the class, thus bringing the whole program into preliminary focus on these particular young people.

From that point forward, it was anybody's program, with the fate of the venture in the laps of the boys

and girls taking part. In desperation, the class salutatorian asked: "How are we to get experience in a job when every employer wants his new workers to come to him with experience?"

A second girl, reflecting more solid thinking than her parents probably thought possible, wanted to know whether or not fathers and mothers should expect to be repaid for money expended in furthering a child's education beyond the high school.

One of the farm boys who desired to enter dairy farming was puzzled about the nation-wide operations of the Federal Surplus Commodities Corporation. Still another boy feared that his associates would look upon him with disdain in later life if he followed his interests and entered a machinist apprenticeship with a steel company. Obviously, the social conflict between white collar and blue shirt jobs had penetrated his consciousness to the extent that it might otherwise have prevented his launching upon a vocational course for which he was fitted by his interests and abilities.

So it went. The activity quickly evolved into an educator's dream of a truly socialized method. Parents inched up toward the edge of their seats to catch every question and the resulting arguments. Class members seemed to forget that an audience was listening on the other side of the footlights, until some pupil's well-turned statement brought down a houseful of appreciative applause.

For one hour and a half the exploration of questions went forward. Only a *sotto voce* hint from backstage brought the chairman to a realization of the fact that time had slipped by and there were diplomas and prizes to be awarded.

Justifiably, you ask: What were the outcomes of the experiment?

Well, it forcibly demonstrated that there were many unexplored fields of thought within the minds of secondary school graduates. It brought home in smashing manner to parents and public that high school graduates are individuals, each capable of sensible, thoughtful oral expression, if the challenge to such expression is great enough. It proved that parents and pupils alike can take away material attitudes toward problems relating to marriage, education, home life, schools and the business of getting along with one another when a practical approach is made to these problems. Stuffed-shirtism can never provide much but platitudes and appealing words in commencement orations.

Finally, it was an initial step on postgraduation followup of graduates. Business men and employers in the audience became acutely aware of this new supply of potential workers.

The accompanying box from the columns of a near-by Sunday newspaper catches the essence of the chief outcome. Has the traditional commencement ever brought that type of practical outcome?

Postgraduation Class Tour for $137

HARRY E. GREENE

Stoneham Junior High School
Stoneham, Colo.

TO THE high school senior the "sneak day" is as closely identified with the closing weeks of his school activities as are the commencement exercises. But the nature of "sneak day" is varied in the individual high schools. To some, it is a trip to Denver; others, with chaperons, spend several days on camping excursions in the mountains. Usually, it is financed by the class, which forces a balance from the funds remaining in the class treasury and the money to be spent on the class gift.

In the high school at Briggsdale, Colo., a different method has been employed for the last four years. Instead of a one or two day "sneak," the seniors take an educational tour. Their financial preparation begins in the early part of the year.

The 1937 group went to Mesa Verde, while the class of the following year went to Salt Lake City. In 1939 the class went to Carlsbad caverns, into Mexico, up the Rio Grande Valley and into the Mesa Verde country.

The 1940 group of seniors planned even a more extensive trip into the Spanish Southwest. There were 11 of them and their assets consisted of a sum of $137. Three adults accompanied the group, which traveled in two automobiles.

The graduates started the Monday morning following the closing of school. Their first stop was at the Woodman Sanitarium at Colorado Springs, Colo. From there they went to the Garden of the Gods.

Tuesday they visited the Taos pueblos, the scenes of Kit Carson's activities and old Santa Fe. The class had studied the history of Colorado, the Santa Fe trail and the building of the Spanish Southwest. Also, the graduates had read of the work of underground waters, which they viewed at first hand in the Carlsbad caverns.

From Carlsbad they journeyed to El Paso, Tex., crossing the International Bridge leading into Juárez, where they visited the shops and public market. They saw the 300 year old church at Socorro.

The Reclamation Service and the power of impounded water were seen at the Great Elephant Butte Dam.

At the petrified forest in Arizona and at the Grand Canyon of the Colorado River, forgotten pages of ninth grade physiography were again brought up and made a vital part of their science studies.

A quick trip through the Indian country took the class past Gallup, alongside the Shiprock and into the Mesa Verde region. The mountain scenery was unfolded in the trip along the Million Dollar Highway, down the Gunnison and Arkansas canyons along the Royal Gorge.

The group had visited four states and one foreign country, three major national parks and several national monuments in eight days.

Nights were spent in camps at which double cabins were obtained at lowest possible rates. Meals consisted of hot suppers and breakfasts; lunches were eaten along the route. Various groups had been delegated to do the purchasing and cooking of the food and their obligation was to obtain the most food for the least amount of money. The class ended the eight day 2700 mile tour with a debit of $5.20, which was covered by an assessment of 47 cents per person. All gasoline, oil and automobile greasings had been paid for from the class treasury.

More Finesse in Firing

MIRIAM GRAY

Physical Education Teacher
Public Schools, Tulsa, Okla.

Miss Teacher decides the wise thing to do is to telephone the superintendent.

IT IS evening on the last day of school in an Oklahoma town. Young Miss Teacher is packed to leave next morning for a summer in Alaska. She is tired from a strenuous year of teaching, the first year in this town. She feels that she has done a good piece of work and remembers several meritorious accomplishments during the year.

Yet, she is perturbed. She has not been notified of her re-election for next year and her conservative nature rebels against spending all her money on a vacation unless her position will be awaiting her when she returns.

Miss Teacher's friends have told her not to worry but she recalls the faculty meeting that afternoon at which the superintendent stated that all teachers were re-elected except one. Could she be that one? Ridiculous!

Nevertheless, after the meeting several teachers had gone into the superintendent's office and had been told by his secretary that they were expected to return the next fall. But when Miss Teacher followed their example the secretary said she did not have that information; it must be acquired from the superintendent himself. There had been something furtive in the secretary's manner, an unnecessary evasion.

Thinking over the oddity of the circumstances, Miss Teacher decides the wise thing is to telephone the superintendent. She does as follows:

Superintendent: Hello.

Teacher: This is Miss Teacher. Could you tell me whether I have been re-elected?

Superintendent: You have not.

Teacher (after a gasping pause): Thank you.

Too stunned to notice the incongruity of her uttered "thank you," she replaces the receiver and is torn by great sobs.

After many minutes she recovers sufficiently to realize what she must do. The trip is impossible now. She must go home and try to find a new position but not until she knows why she has been discharged.

The next morning she again telephones the superintendent and asks to see him. In the resulting conference he is patently uncomfortable while relating various minor statements he says her two principals had made concerning her work. What makes it difficult for her to comprehend is the fact that the same principals had never criticized her work in the slightest degree during the year nor had they even made any suggestions. They had always been agreeable to any innovations she proposed.

In contrast to the brutal handling of the foregoing case, let us consider another teacher in another town in Oklahoma. This, too, was her first year in a new position. She had a hard situation and had had considerable difficulty with discipline. Her supervisor helped with suggestions; her principal made criticisms and suggestions, and her superintendent asked her to come to his office for an encouraging conference. All this occurred before the end of the first semester. Near the middle of the second semester she received a letter from the superintendent stating that it was his intention to use her services again the following year and, if at all possible, she would be transferred to another school for a fresh start.

The following year she was indeed given a new chance in a better situation and was helped by continued conferences with supervisor, principal and superintendent. After a two year trial in the new school she received a letter in March from the superintendent advising her that it seemed best for both parties concerned to discontinue her services effective at the close of the school year and wishing her success in whatever new work she found. She had two months in which to finish her work and take necessary steps toward finding a new position. She was disappointed, yes, but she could feel that she had been humanly treated and given the benefit of every possible doubt.

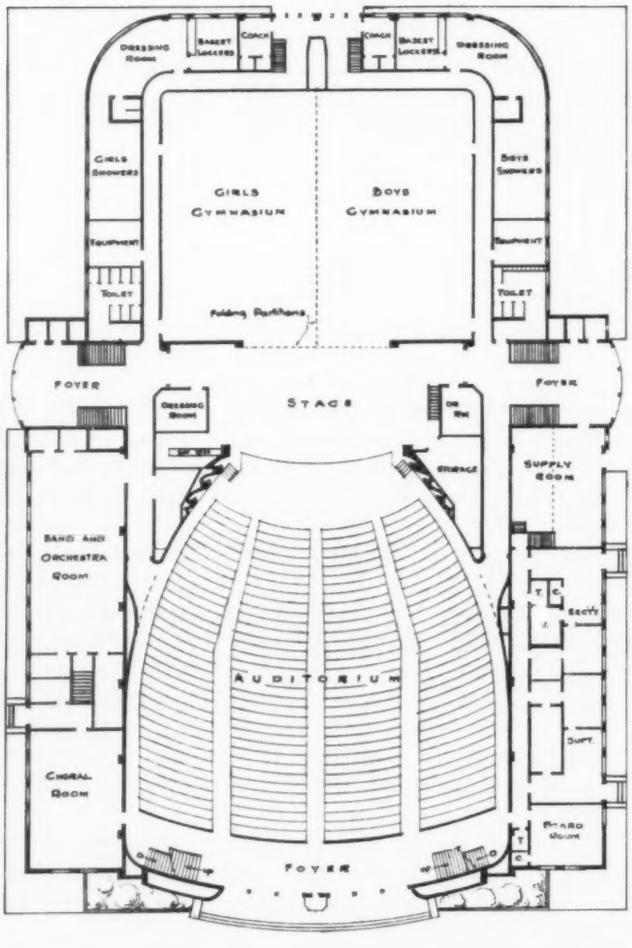
She soon found a new position much more to her liking and she has been happy and successful there.

What became of Case No. 1? She went home beaten, discouraged and too unhappy even to try to find new work for nearly a month. Nothing particularly worth while developed when she finally made an effort, so she took the money she had saved for her trip and spent the year in school procuring a master's degree and rehabilitating herself. She did commendable work and obtained a good position. Yet she still carries the psychological scar of that slowly healed wound so cruelly inflicted by an abrupt, unjustified dismissal.

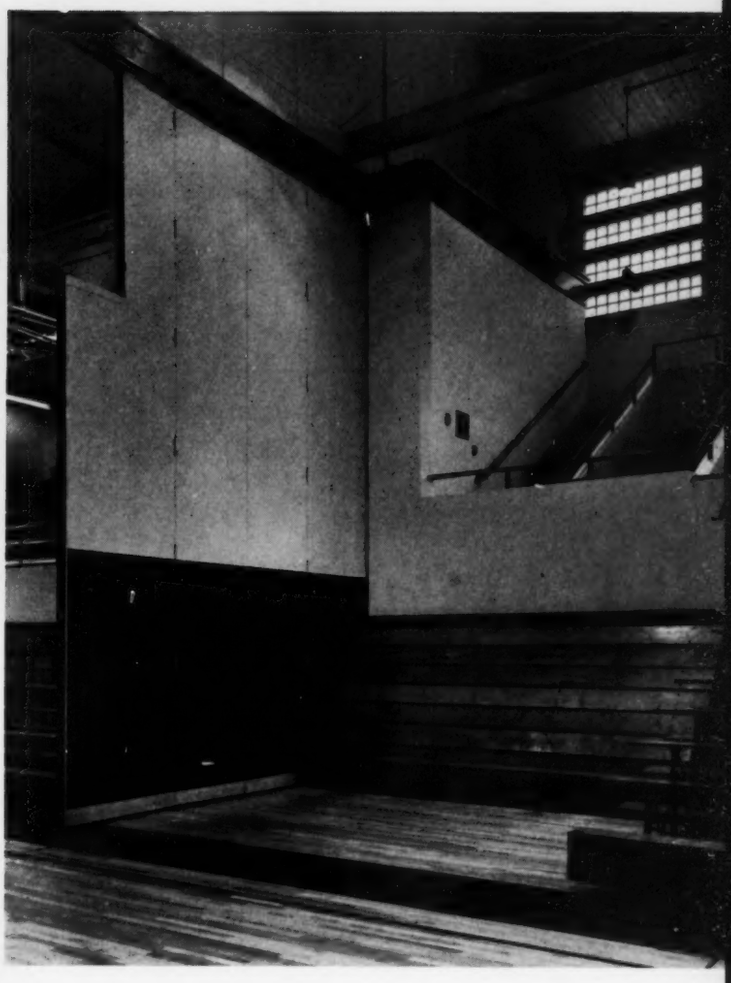
If teachers must be dismissed—and unquestionably some must be—let superintendents learn the fine art of firing them. There is no need to twist the knife by a clumsy technic. Let there be more finesse!

HIGH SCHOOL AND CIVIC AUDITORIUM-GYMNASIUM EVERETT, WASH.

Above: The main entrance, showing particularly the ticket booth and the fluorescent lighting arrangement. The latter is housed in the aluminum ball and glass projections just over the doors. Below: Beneath the gymnasium is the "Sea Gull Inn," the school cafeteria, which serves 800 daily. This is a closeup of the serving counter, which is designed to serve in relays, 420 pupils at a time. The kitchen is furnished entirely with electrically controlled equipment, having the largest number of electric hot food tables of any kitchen in the Pacific Northwest. A separate dining room is provided for teachers. Menus feature a 12 cent plate. Right: Main floor plan. Total construction cost was $333,400.



EARL W. MORRISON, Architect
ERWIN E. WEBER, Mechanical Engineer



Above: The gymnasium, looking from the end of the playing floor. For physical education classes a folding door pulls out from between the stairs in the right of the picture and divides the gymnasium into two parts, which are used during the day for boys' and girls' physical education classes. Left: Closeup of one of the transparent glass basketball backboards.

Top, center: The main floor of the auditorium has 1550 seats and the balcony, 663 seats. Lighting is entirely indirect. The stage is 32 by 67 feet and is provided with 16,000 watts of footlights. The auditorium is equipped with a modern fireproof projection booth, asbestos curtain and automatic sprinkling system. Acoustically, it has been pronounced exceptionally good. Just back of the stage and extending crosswise of it is the gymnasium floor, surrounded by balcony seats on three sides. A folding door opens between the rooms so that it is possible to seat 2213 people in the auditorium and 1500 in gymnasium to see a stage production. Right: The room in which a band of 856 members and an orchestra of 60 meet to practice daily. The upper part of the room is treated acoustically and heating is done by hot water pipes installed in the ceiling. Adjoining the instrumental music room are a large choral room accommodating 100 pupils, supply and practice rooms.

Dayton Schools About Face

IN OCTOBER 1938, the city of Dayton was given world-wide publicity because its public schools, which enroll 34,000 pupils, were closed due to lack of funds. This dramatic but carefully considered decision of the Dayton board of education to close its $15,000,000 school plant raised a whole series of questions: Why should a wealthy, rapidly growing city such as Dayton find it necessary to close its schools? Was this lack of support due to lack of interest in the schools? Had the state failed to provide satisfactory taxing machinery and support? Was this, as suggested by some,[1] another link in a chain of evidence of the breakdown of democracy in this country? These and a host of other questions were raised not only by citizens of Dayton but by citizens of Ohio and of the nation as well.

It is the purpose of this article to sketch briefly the background leading up to this unusual event and to indicate briefly the steps that have been taken to restore the confidence of the citizens in their schools.

Troubles Began in 1931

A study of the Dayton schools from 1799 to 1930 gives abundant evidence that throughout this long period of time the citizens were keenly interested in their schools and supported them well. Serious troubles, then, in the Dayton schools began about 1931 when tax valuations and collections began to decline and when demands for relief and other drains on public revenues greatly affected the income for schools. These factors, as well as the attitude of the citizens, also were affected by the closing of a Dayton bank and the majority of the building and loan associations, prior to 1929.

Because of statutory and later constitutional tax limitations, Ohio boards of education submit levies outside limitations for current school support. These Dayton had consistently voted until 1932. Beginning in that year, however, the sentiment changed so that between 1932 and 1938 six efforts to renew these levies were defeated. These levies, which ranged from .8 mill to 3 mills in amount, received favoring votes of 45, 38, 49, 43, 46 and 45 per cent, respectively.

Coupled with these defeats of special levies was a rapid decline in the tax valuation in the Dayton city school district. In 1931 this was $415,000,000, while by 1936 it had declined 30 per cent. However, owing to poor tax collections, the school income declined even more sharply than did the tax valuation. In 1931 the operating receipts amounted to $3,163,000, while in 1936 the amount raised locally for this same purpose amounted to only $1,015,676.

A further complicating factor occurred in 1934 when an amendment to the state constitution of Ohio was adopted reducing the maximum assessment on real property without a vote from 15 mills to 10 mills.

In an effort to fit the school program into this picture, the board of education and superintendent effected 27 different economies between 1930-31 and 1936. These included the elimination of the following: kindergartens, the entire supervisory staff, the Dayton Junior Teachers College, the department of visiting teachers, night schools, the Girls' Prevocational School, the Boys' Prevocational School, free summer schools, free evening use of school buildings, the department of publications and the department of research. The curtailments also included a 20 per cent reduction in school personnel, a 15 per cent reduction in the monthly rate of pay, a nine month term of school instead of a ten month and an appreciable increase in the pupil-teacher ratio.

Between 1936 and 1939 the tax valuation increased about $30,000,000. This, together with better collections and the enactment of the state school foundation program, which furnishes more than one million dollars annually to the Dayton schools, made it possible for the board of education to restore some of these services. However, in January 1939, 17 of these economies were still in effect.

During 1938 it became evident that all funds for operating the schools would be used before Jan. 1, 1939, the beginning of the new tax year. Furthermore, according to Ohio law, even though the special levy voted on at the Nov. 8, 1938, election had carried, it would not become effective until 1939. In the light, then, of this situation, the Dayton board of education on Oct. 26, 1938, adopted a resolution to close the schools on the following Saturday.

Creates Great Excitement

Needless to say, this action created great excitement in the city of Dayton. The following day there appeared three editorials in the Dayton papers with these titles: "What's Wrong With Dayton?" "The Price of Complacency," and "What About It, Dayton?" Effort was made to get an injunction to prevent the board of education from closing the schools. The board and superintendent were cited for contempt of court and for a time it appeared they might be put in jail. Many blamed the board of education for the closing.

Frantic appeals were made to have the governor of the state call a special session of the legislature to deal with the situation. Similar appeals, likewise, were made to the different agencies of the federal government but to no avail. Furthermore, word was carried by the Associated Press newspapers over the country and even into foreign lands. Newsreel people took pictures of the superintendent in his office, the closed schools and other aspects of this unprecedented happening. Even in the *Wall Street Journal* there appeared a lengthy article entitled: "Lack of Funds Closes Schools in Dayton, Ohio." As a result of these happenings, the Dayton schools in 1938-39 operated only eight months.

Prior to the November 1938 election at which a 2 mill levy for school purposes was proposed, there was organized a group of citizens known

[1]Foreign representatives of the National Cash Register Company reported that in Germany this closing was cited as another example of the breakdown of democracy. Also, a letter was received from Russia stating that this could not occur in a communistic state.

The Story of a City's Fight for Funds

T. C. HOLY

Professor of Education
Ohio State University

as the "Committee of One Hundred" to sponsor this levy. Following its defeat, this committee was reorganized to give representation throughout the county on a population basis and became known as the Montgomery County public advisory committee. Commenting on the committee, M. A. Spayd, its chairman, made this statement: "The public advisory committee was a movement of a sadly harassed people who were literally at their wits' end."

In casting about for the next steps, this committee concluded that an exhaustive study should be made of the schools of Dayton and of the city and county governments, because out of total expenditures of $14,500,000 in 1938 for all three agencies 25 per cent was expended by the county, 52 per cent, by the city and 23 per cent, by the schools.

Serious troubles in Dayton schools began about 1931, culminating in the closing of the schools in October 1938. Now in 1941 the system is again stable, largely through the efforts of civic minded citizens and as the result of the recommendations of the Montgomery County Survey

Raise Funds for Survey

To carry on such an extensive study involved the raising of funds. This the committee set out to do, aided by the Students' Fathers Club, which had been organized to help get a special levy through in August 1939. These two organizations, aided by other civic groups and individuals, raised $36,468 from 8825 donors.

The next problem was that of finding an organization equipped to carry on this comprehensive study of these three agencies of local government: county, city and schools. After canvassing the country thoroughly, the Public Administration Service in Chicago was engaged to carry on this study. This service selected a survey board consisting of Col. Henry M. Waite, Dayton's first city manager, chairman; Dr. George A. Works of the University of Chicago, and Herbert Emmerich, associate director of the Public Administration Clearing House, to direct the study.

Since from nine to twelve months would be required to make the survey, would the school year of 1939-40 be another eight month term as in 1938-39? Interested organizations and individuals urged the submission of a 2 mill levy for one year only at the August 1939 primary election. However, the board of education hesitated, despite the support given the proposal by the Students' Fathers Club and the press. Finally, the board passed this resolution, with the result that a 2 mill levy was approved for one year by a favoring vote of 57.7 per cent. This, after six consecutive defeats, and the survey assured were important events in the about-face program.

With the machinery thus established, the survey board of three members concluded that the major attention should be given to the curriculum of the secondary schools, the school plant, school organization, the teaching personnel, the administration and the finances. Specialists in these various fields were then selected by the committee to carry on these different studies, which were then reviewed by Homer W. Anderson, superintendent of schools, St. Louis, and DeWitt Morgan, superintendent of schools, Indianapolis. With the excellent cooperation of Supt. Emerson H. Landis and his staff, these reports were completed and the conclusions and recommendations released to the public in June 1940. The major recommendations relating to the public schools were as follows:

1. Extensive modification of the curriculums of the high schools better to adapt them to the needs of both pupils who enter college and those who do not intend to do so.
2. Continuation of the present salary schedule but revision to be made relatively soon.
3. Organization of the schools on an 8-4 plan, thus allowing the abandonment of the Steele High School and the Lange Elementary School.
4. Appointment of an assistant superintendent in charge of curriculum, a director of research and a director of personnel.
5. A "pay-as-you-go" basis for all school district expenditures, including capital outlay improvements.
6. Submission of a special tax levy of 2½ mills for a three year period and 2 mills for the two remaining years of a five year period.

All these recommendations, together with those applicable to the city and county, and the supporting data have now been printed in a 529 page report entitled "Montgomery County Survey."[2]

Obviously, there was much speculation on what would be done with the survey results. Many thought they would be given little or no consideration. A person was quoted as having said, "The P.A.C. report is dead as a doornail." In the light of the six defeats of special levies for school purposes, this reaction seemed a fairly logical one. That such was not the case, however, is indicated by a resolution adopted by the board of education on July 2, 1940, which contained this statement: "Resolved, that the recommendations contained in the P.A.C. Survey Report relative to the reorganization of the Dayton school system from a 6-3-3 plan to an 8-4 plan be approved and adopted, effective with the school year 1940-41."

Carrying Out Recommendations

The carrying out of this recommendation included a change in the number of grades accommodated in 31 of the 47 Dayton schools, the abandonment of the Steele High School, with the distribution of its

[2]Copies of this study are available through the Public Administration Service, 1313 East 60th Street, Chicago. $3.50.

1200 pupils among the other high schools in the city; the abandonment of the Lange and McKinley schools as elementary centers; the conversion of the Wright Junior High School into a 9 to 12 grade school, and the combining of the Fairview Senior and Colonel White Junior high schools into one four year school.

Obviously, these meant extensive changes in school boundary lines, transfer of equipment, considerable remodeling and many other changes involving time. That all these were brought about before the opening of school in September 1940 is a high tribute to the board of education, Superintendent Landis, the assistant superintendents, the principals and other members of the school staff. Furthermore, that they were carried out with so little confusion again speaks well for the careful planning of the superintendent and his staff and is further evidence that the citizens of Dayton had concluded that some drastic changes were necessary to correct the present difficulties.

Later, the board appointed an assistant superintendent in charge of curriculum, who is carrying out to the letter the curriculum recommendations contained in the public advisory committee report. These provide for a large number of committees representing teachers, principals and the lay public for revising the curriculum in line with the objectives of the schools.

To date, 21 committees, with a total membership of 215, together with about 300 teacher members of the departmental committees, are at work on this problem. Excellent headway is, therefore, being made in this direction.

Citizens Take Over Campaign

The survey recommended that there be submitted a 2½ mill extra levy for a three year period and a 2 mill levy for the remaining two years of a five year period in order to carry out the program recommended in the report. In the light of the six previous failures, there were grave doubts whether this levy would carry. In fact, this belief was shared by school officials themselves up to three weeks before the election. At that time the superintendent of schools presented to a number of prominent Dayton citizens the dilemma in which the schools would be if the levy failed. This was done so effectively that a group of prominent men and women took over the campaign, organized, financed and so handled it that the levy carried. As evidence of the community interest, $2964.50 was raised by voluntary subscription for this campaign.

In this campaign, which was headed by Mrs. Park Wineland and Kurt Roehll, the press, radio, churches, P.-T.A., service clubs, labor groups, political organizations and other public spirited groups and individuals assisted. Frederick H. Rike, head of a local department store and one of the leading businessmen of the city, made these comments: "Dayton must maintain a proper educational system or it will become a decadent city. . . . I have never found the people of Dayton falling short in their support of a good cause when they understand the situation."

Mr. Rike also placed his advertising staff at the disposal of the levy committee, which was given free office space in the Gas and Electric Building. As a result of this cooperative endeavor, some 65 committees were organized, houses were canvassed and other means utilized in informing the public. As a result of these combined efforts, the levy of 2½ mills for three years and of 2 mills for the remaining two years of a five year period was approved by a majority of 58 per cent.

In this entire campaign perhaps the most important single factor was the attitude of the newspapers. Day after day, news items, editorials, feature articles and other materials regarding the needs of the schools appeared. Joseph Myers, a staff member of one of the local papers, for example, prepared a series of articles on the public advisory committee report, as well as many others dealing with the problems of the schools.

The continued defeat of the special levies over a period of seven years gave rise to charges of inefficiency, poor management and other similar indictments. In fact, among the common charges made was that the schools were overstaffed, the teachers, poorly prepared and generally overpaid. However, the information brought to light in the survey made it clear that these charges were not supported by facts.

Now with the assurance of five years of adequate financing, the situation is completely changed. The morale of the school staff is high, as is also true of the city as a whole. Furthermore, the inconvenience brought about by the extensive reorganization effective in September is largely forgotten. Here, then, is an example of 200,000 people who, when the facts regarding their public schools are brought to them in a clear, concise manner, have taken the necessary steps to correct that situation. To my knowledge, no other large American city has undertaken to solve its educational and governmental problems in this thoroughgoing manner.

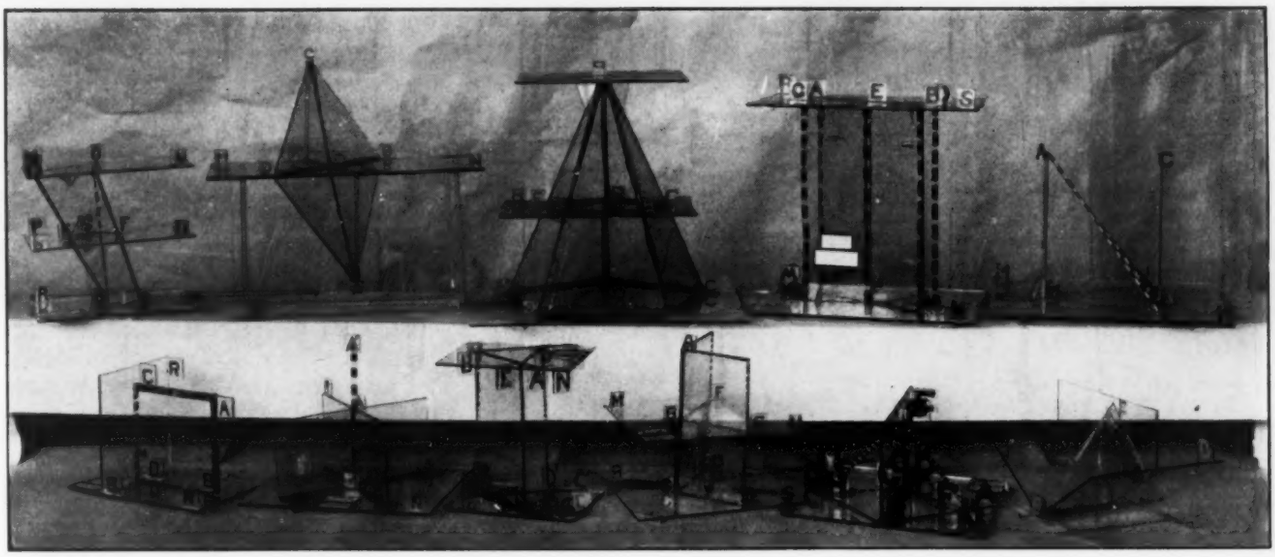
What Are City and County to Do?

The question that the citizens are now asking is what the city and county are going to do with the recommendations applicable to them. In concluding these there is this significant statement: "The citizens of Dayton and of Montgomery County have in the past frequently demonstrated their creative capacity in the fields of invention, industry and government. Today they have been presented with another challenging opportunity, to set before the nation an example of improved local government by insisting on a better integration of the resources and operations of all the agencies that serve them."

Thus far some headway has been made by the city but little by the county. In an editorial in one of the Dayton papers there appeared this statement: "The Dayton board of education has put the P.A.C. survey to work and has received the most practical kind of popular endorsement of its action. Now the Dayton city government demonstrates its intention to use the report as fully as possible. There are also proposals in the survey to the various officials of the Montgomery County government, who should be encouraged by the example of their fellow public officials to follow a similar course."

If these two units of government make progress similar to that of the Dayton board of education, then, undoubtedly, the Montgomery County survey will go down as one of the major achievements in the history of the city of Dayton.

The author is greatly indebted to Emerson H. Landis, superintendent of schools, Dayton, who furnished much of the original material used in this article, and also to Dr. Earl W. Anderson of Ohio State University for critically reading the original manuscript.



Glass Models Show Third Dimension

J. E. RUSSELL

Mathematics Teacher, Eureka, Ill.

GEOMETRY teachers, the country over, realize the difficulties encountered by solid geometry pupils in visualizing three dimensional forms represented by two dimensional diagrams. Geometry cannot be studied effectively, at least in Euclidean form, without an understanding of solid figures. Teachers have attempted to accomplish this result by using models formed of wood, cardboard and other opaque planes.

Authors of textbooks in solid geometry have recognized the problem of developing three dimensional thinking on the part of the pupil and have tried to meet it by replacing the usual diagrams with halftone engravings in their texts. This type of representation is a definite aid but in my opinion there is no teaching device that can meet our problem as effectively as a good set of transparent models.

The pupils enrolled in the solid geometry classes in Eureka Township High School, Eureka, Ill., have made many glass models from panes of glass, transparent cement, cellophane pop bottle straws, glass tubing and various colors of paint and have found that they meet their needs successfully.

Much experimenting was required before they arrived at a good method of construction and agreed on the best materials. For example, some of the first models were lettered with pieces of cardboard and all parts glued with transparent cement, but it was found that the letters lost their shape readily and were easily displaced and that the cement contracted and cracked, leaving loose joints.

The next step was to use squares of celluloid with letters cut from thin colored paper pasted upon them and a more expensive transparent glue for the joints. This was a pronounced improvement, making the models strong and permanent, but the paste on the celluloid caused it to curl rather than to stand perpendicular to the surface to which it was attached. The latter difficulty was met by using ½ inch squares of glass with letters painted on them free hand. A few of these models are shown in the accompanying picture.

In constructing the models, the pupils used glass tubing for lines perpendicular or oblique to planes and a ⅛ inch strip of paint for lines lying in a plane.

The lines were painted neatly by placing two parallel strips of tape on the glass with the proper space between them and then painting between the strips. When the paint was dry the tape was removed, leaving a smooth, straight line. The models actually are used in proving theorems and problems. The pupils congregate near the demonstrator and the proof is given. Many pupils show surprise at being able to see the figure and the proof whereas they had not been able to see them from the textbook diagram.

The foregoing use of models does not destroy the pupil's ability to diagram and read drawings of three dimensional figures but, when used properly, will strengthen this ability. Pupils should be given practice and experience in making diagrams and should use the models chiefly to extend and to supplement the understanding that they gain through diagrams.

It is well to give pupils an opportunity to improve their rating in the class by doing extra credit work of this kind and, when a good piece of work is submitted, it is well to give it special recognition before the class.

This work is not done during the class period but may be done at any other time. It is done by volunteers in the class and is never given as assigned material. In spite of this we have not had a pupil in the course, either girl or boy, who has failed to make at least one acceptable model.

In doing this work we are in keeping with the principle that pupils learn by doing and we are substantiating the administrative policy of the school in which all departments are urged to provide opportunities through projects and demonstrations for self-expression on the part of the pupils.

Changing From a K-6-3-3

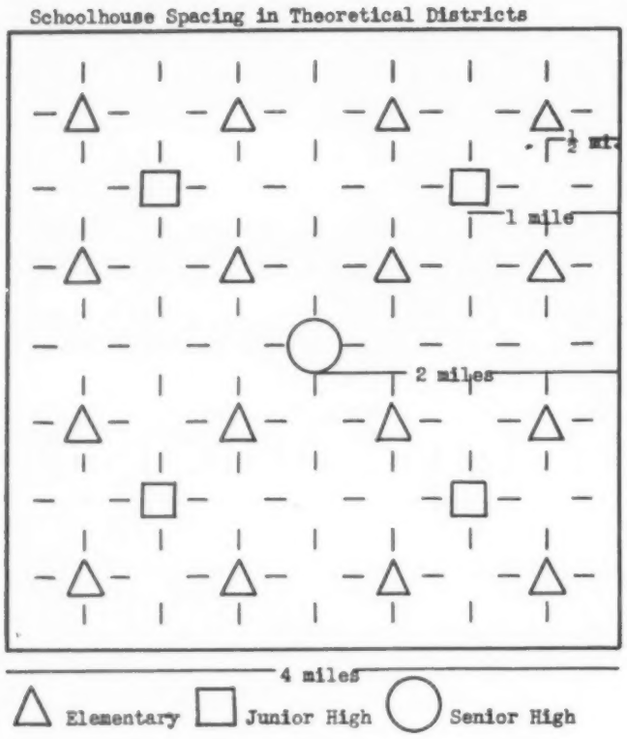


Chart 1

SCHOOL organizations are changing continuously to meet new demands. In some sections this has been met by changing from a K-6-3-3 to a K-6-4-4 organization. The spacing problems resulting from this change are not insurmountable. This problem was attacked from two points: (1) establishment of a theoretical district; (2) analysis of a practical metropolitan school district.

The basic organizational principles of the K-6-3-3 and the K-6-4-4 organizations are applied to this theoretical organization to illustrate the differences in the spacing problems. The population of this district (illustrated on Chart 1) is 100,250 persons, uniformly distributed. The assumed uniformity of population in this 4 mile square district provides each school with the same number of pupils. A large population is established to make the minimum size of 800 pupils for each elementary school. Space allocation is derived upon the basis of 100 per cent attendance. Spacing standards are those generally used, expressed in gross undistributed area, providing for the elementary school, 19 square feet; the junior high, 22.5 square feet, and the senior high school, 27 square feet.

The elementary school in both types of organizations will be identical with a total enrollment of 837 pupils. The space needed is 15,903 square feet. A school of this size will be large enough to provide a program of sufficient breadth to provide flexibility of curriculum and a platoon school of approximately 22 sections.

The junior high in the K-6-3-3 organization will have an enrollment of 1137 pupils. It is large enough to provide grouping upon the ability basis with a wide general range of subjects. Allocated area will necessitate 25,462.5 square feet. The comparable institution in the K-6-4-4 organization is called the high school. This school is a four year organization instead of a three, with an enrollment of 1468 pupils. This enrollment necessitates an area of 33,030 square feet, or an increase of 18.9 per cent gross area.

The largest school of these organizations is the senior high or community college. Under the K-6-3-3 plan a well-rounded departmentalized program is possible with the enrollment of 4000 pupils, necessitating a gross area of 108,000 square feet. The community college, including grades 11 to 14, inclusive, will have an enrollment of 5350 pupils. The space of the senior high will need to be increased 33.6 per

Table 2—Area and Approximate Number of Classrooms Essential Under an Instructional Space Efficiency Policy of 80 Per Cent

School	*Area Needed Sq. Ft.*	*No. of Classrooms*
High School....	35,210	54
Junior High:		
No. One.....	26,819	50
No. Two.....	7,948	14
No. Three....	39,106	72
No. Four.....	18,296	34

Table 1—Distribution of Total Number of Pupils in Grades of Theoretical Units

Grade	*Age*	*Total*	*Single School* K-6-3-3	*Single School* K-6-4-4
K	5	2065	128	128
1	6	1975	123	123
2	7	2055	127	127
3	8	1915	119	119 ELEMENTARY
4	9	1865	116	116
5	10	1855	116	116
6	11	1724	108	108
				Total 837
7	12	1744	433	433
8	13	1544	386 JUNIOR HIGH	386 HIGH
9	14	1474	318	318 SCHOOL
			Total 1137	331
				Total 1468
10	15	1323	1323	1293
11	16	1293	1293 HIGH SCHOOL	1384 JUNIOR
12	17	1384	1384	1414 COLLEGE
			Total 4000	1263
13	18	1414		Total 5350
14	19	1263		

to a K-6-4-4 Organization

RALPH F. FROSTIC

Science Teacher, Ferndale High School, Ferndale, Mich.

cent, or to 144,450 square feet, to accommodate the load.

Changing this organization from a K-6-3-3 to a K-6-4-4 necessitates the following:

1. The junior high will be changed to the high school and one grade, the tenth, will be added.
2. The high school will be converted into the community college. The tenth grade will be transferred to the senior high school and grades 13 and 14 added.
3. These changes will increase the high school enrollment by 331 pupils. The community college enrollment will be increased 1350 pupils.
4. Spacing area in the junior high schools will need to be increased by 4567.5 square feet, or by 18.9 per cent.
5. The spacing area of the high school will need to be increased 36,450 square feet, or 33.6 per cent, in order adequately to house the community college.

A typical high school attendance district within a metropolitan center, including the subsidiary junior high school districts, was analyzed and the changes applied to determine the effects of adding grades 13 and 14. This is a highly complicated metropolitan area classified generally as residential with small areas used for industrial and commercial activities. The transportation facilities are sufficient to accommodate the necessary changes of travel for pupils. The

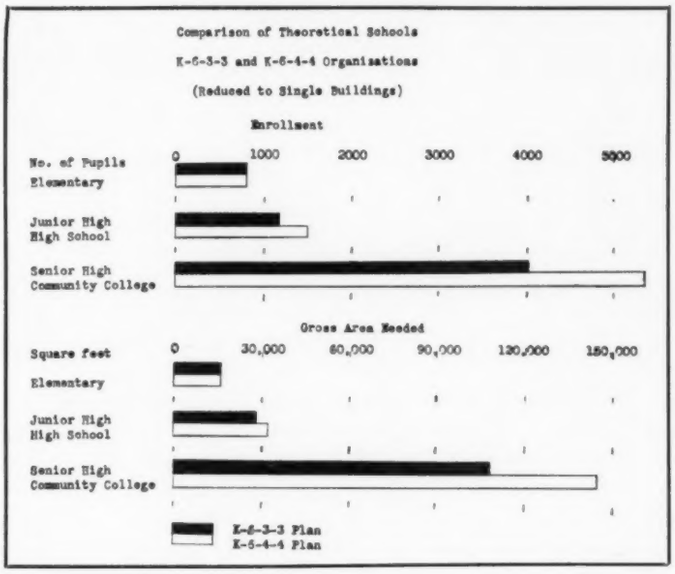


Chart 2

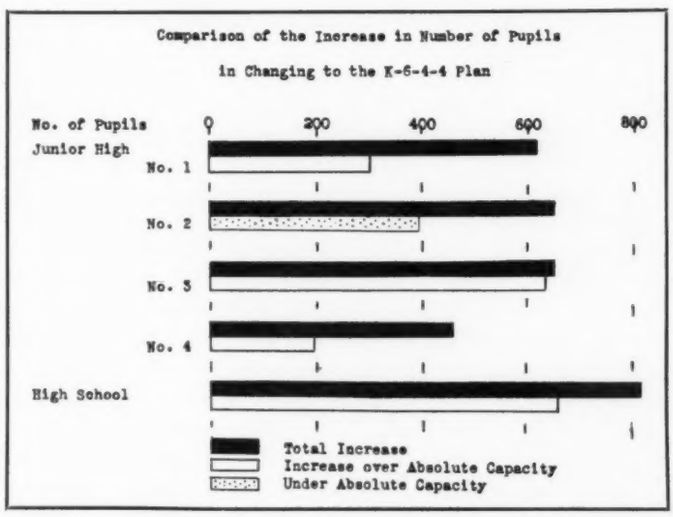
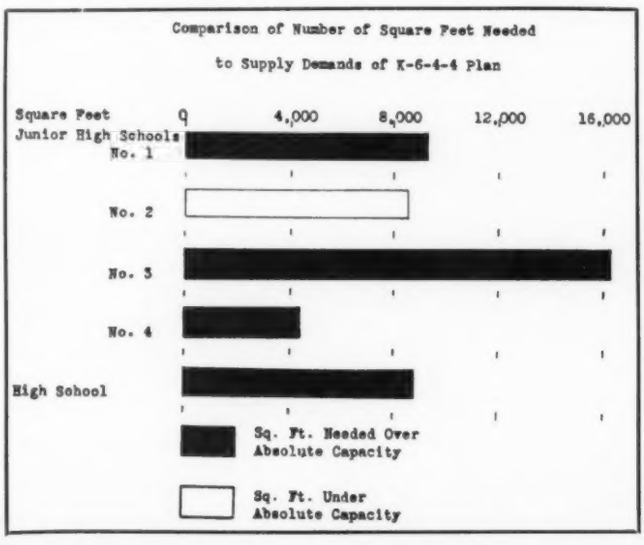


Chart 3



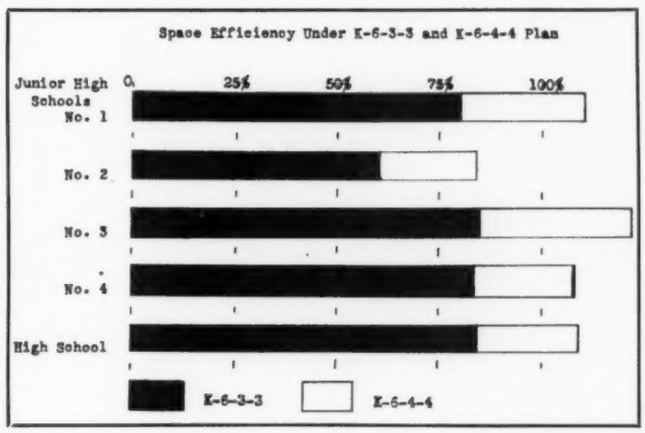


Chart 4, above.

Chart 5, at left.

school census indicates that the population of this district is stable.

The four junior high schools are relatively new, most of them erected in the last ten years. The senior high school is also a modern building. All of these buildings were constructed with the possibility of expansion.

The increase in the number of pupils as a result of this change is not constant. By adding the tenth grade to each junior high school, the increase ranges from 839 in two schools to 458 in another. The senior high school will have an increase of 823 pupils by discontinuance of the tenth grade and the addition of grades 13 and 14.

This increase in number of pupils produces a housing problem in all schools except junior high school No. 2. The increase of 839 pupils in this school will leave it 393 pupils under its absolute capacity. This result is due to a gradual decline of population in this junior high district. All other junior high schools will have an increase over the absolute capacity, ranging from 624 to 204 pupils. The high school attendance will be 659 over the absolute capacity.

The increase of pupils over the absolute capacity demands an increase in the gross undistributed instructional area in all buildings except junior high school No. 2. This school will have a surplus of 8903 square feet operating under the K-6-4-4 plan. The remaining junior high schools will need an increase of gross undistributed instructional area ranging from 16,029 to 8874 square feet. The increase interpreted into average classrooms ranges from 30 in school No. 3 to nine in school No. 4. The senior high school will need only an increase of 14 classrooms, or 8874 square feet. This increase in area is not as large as one would expect under a 100 per cent efficiency plan. The average increase in the present buildings is only 10 classrooms. Under normal conditions of school plant operation most of the present schools are only slightly deficient in the area needed for this type of organization.

In spite of the fact that this study revealed that one school must add 30 rooms, it is significant that by slight alteration of present attendance area the average increase needed is only 10 classrooms operating at 100 per cent space efficiency. In the light of the present decline of population it is probable in the near future that present buildings may, without change, adequately house the K-6-4-4 organization.

An instructional space efficiency of 80 per cent is considered by some school administrators as an effective use of plant. Operation under such a policy will demand a much greater increase of area, resulting in an average of 45 classrooms.

Music Is Community Project

LLOYD F. SWARTLEY

Director of Instrumental Music Public Schools, Duluth, Minn.

THE city of Duluth, Minn., with a population of 101,000 and a public school population of 19,077, has three senior high schools, seven junior high schools and 33 elementary schools.

In the Duluth schools the instrumental music department, as far as city-wide participation is concerned, is a newer project than the vocal work. As in most city schools, vocal music is well established.

In the instrumental program every child is required to participate in class lessons at which time approximately twelve minutes is devoted to individual attention per child each week. Accompanying these class lessons is a specific course of study, the requirements of which must be met by each child in order to receive a grade for his efforts.

In the elementary schools, ensembles are held once a week for young players, while in the junior and senior high schools, the ensembles meet every day for one hour. Whenever possible, band and orchestra are scheduled at the same time. A string specialist handles the string rehearsals three times a week. The other two days of the week the instruments necessary for the orchestra are excused from the band to participate with the orchestra. Because of the shortness of time for individual attention, second, or "B," band practice in high schools is held only twice a week and on the other days these children are required to attend elementary theory classes. The larger part of progress, therefore, becomes the responsibility of class instruction, with large group participation as the reward for individual progress.

In some of the schools, instructors spend part of their time in regular classroom subjects; in other schools, there is a combination of vocal and instrumental work. In these cases, specialists on various instruments teach the technic classes insofar as the director needs their teaching time.

All instruction above the elementary grades is free. Children in the elementary schools pay a tuition fee of $4.50 a semester, which helps greatly in reducing the cost of the program to the schools. These fees in the grade schools, plus the large groups in ensembles, make the per pupil cost of instruction no greater than for any other subject in the school.

Individual schools may purchase any instruments they desire but, of course, their funds must come through concerts. As far as the board of education is concerned, it maintains a budget for new instruments, repairs and music. Each year each junior high school receives approximately $700 for new equipment, repairs and music; each senior high school, approximately $1200.

Each year during Education Week, band, orchestra and chorus come together to participate in a spectacular display. Last year a large orchestra supported a chorus of 1200 voices in a twenty minute program. A 300 piece band also gave a short concert.

In addition to the regular school bands and orchestras, during the winter an all-city school symphony is maintained as well as a picked band of 90 players. In addition to this, children are privileged to play in a junior symphony under the direction of Paul Lemay, conductor of the City Civic Symphony Orchestra.

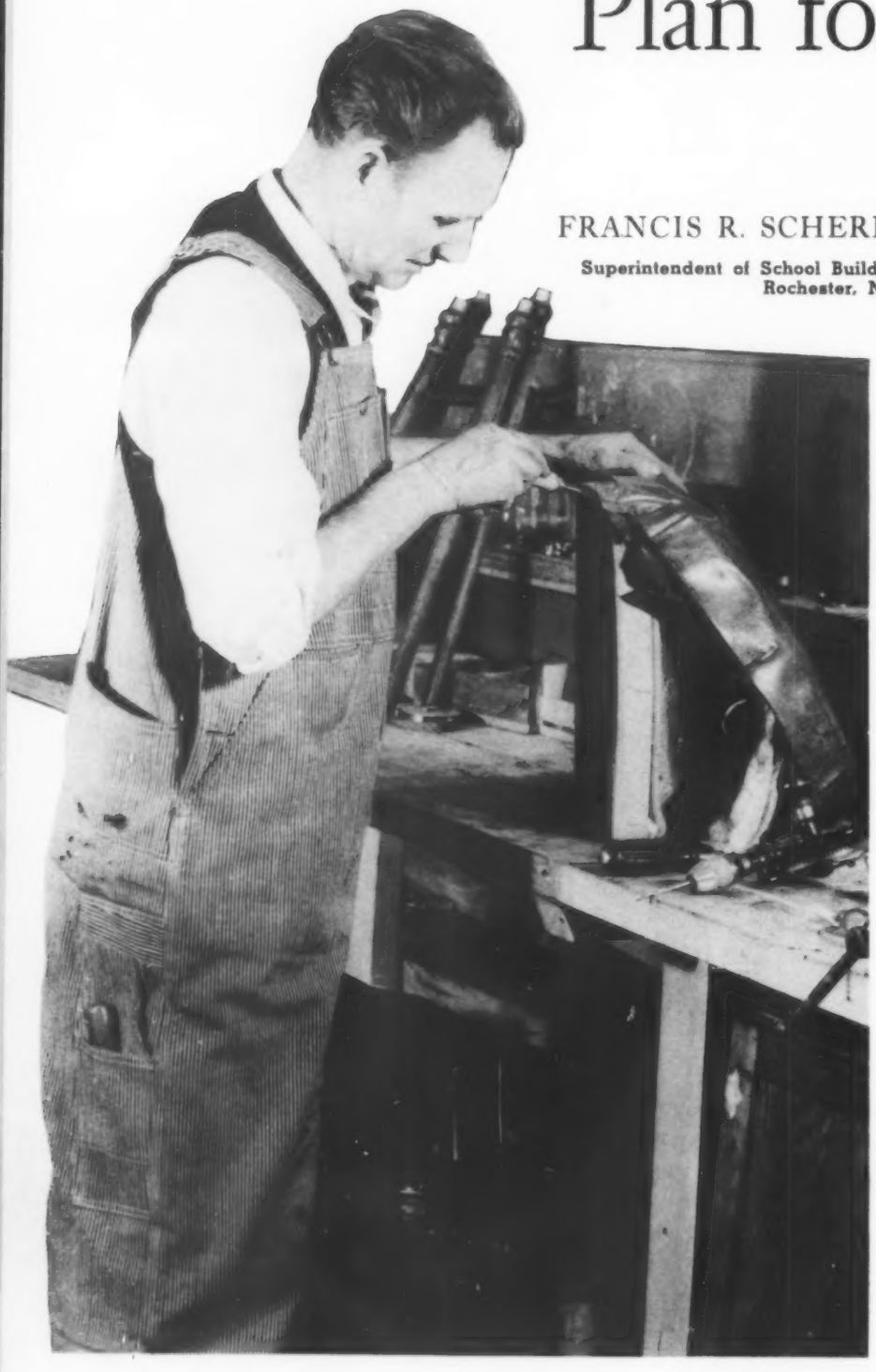
These musical advantages, combined with the fine studios located in the city, offer an opportunity for Duluth citizens to develop an intelligent appreciation of good music and to participate in these community projects.

EPAIRS • VACATION SCHEDULES • MECHANICAL EQUIPMENT • FLOORS
URNITURE CLEANING AND REFINISHING • FIRE AND ACCIDENT PREVENTION
LAYGROUND SURFACES • REPAIRS • VACATION SCHEDULES • FLOORS
ACATION SCHEDULES • MECHANICAL EQUIPMENT • FLOORS • REPAIRS
ECHANICAL EQUIPMENT • FURNITURE CLEANING AND REFINISHING
IRE AND ACCIDENT PREVENTION • PLAYGROUND SURFACES • REPAIRS
EPAIRS • VACATION SCHEDULES • MECHANICAL EQUIPMENT • FLOORS
URNITURE CLEANING AND REFINISHING • FIRE AND ACCIDENT PREVENTION
LAYGROUND SURFACES • REPAIRS • VACATION SCHEDULES • FLOORS

Planning for *Summer Renovations*

Plan for Summer

FRANCIS R. SCHERER
Superintendent of School Buildings
Rochester, N. Y.



● It is the general practice to have the janitorial force go over all pupil seating during the summer and give it a thorough cleaning and make all the necessary repairs. When refinishing only is indicated this is frequently done at the school. In the Nichols Intermediate School, Evanston, Ill., in which this photograph was taken, a member of the maintenance staff is repairing an auditorium chair seat in a shop within the school building.

IT IS none too early to get together a program of repairs and renovation for the summer vacation period so that in September the physical plant will be in as good condition as the budget will permit.

Planning ahead is more important now because of uncertain deliveries on some materials and the prospect of a shortage of skilled building mechanics in some localities. Insofar as can be known now, it would seem desirable to make commitments at this time for delivery of such materials as boiler tubes, piping, flooring, sash, paint, hardware and special cleaning supplies before school closes in June.

When new building or instructional equipment or replacements are needed for the reopening of school in September early plans and approvals should be sought so as to give manufacturers an opportunity to fill orders in the light of priority assignments they already have or will get in connection with defense work.

Budgetary limits usually determine what can be done this year and what must wait over. There are, however, some items that affect life and health and these should receive attention. They have to do with conditions of stairs, corridors and exits, elimination of fire and accident hazards and the proper functioning of the heating, ventilating and sanitary systems. Next to these "musts" on the program will come that type of repair to the building or equipment which, if not corrected now in its early state of disrepair, will lead shortly to a condition of disintegration or breakdown that will cost many times the estimated cost to correct the condition first found or anticipated.

In order to spread maintenance work more evenly throughout the year and so keep maintenance men gainfully employed, an effort is made

Repairs

principals are found to be cooperative in such matters once they are made acquainted with reasons for doing them.

However, many things necessarily must remain for summer attention, especially such items as the boiler plant and heating system, floors, furniture, washing of walls, replacing rotted window sash and regrading play areas.

Careful and frequent inspection of roofs is advisable if leaks are to be prevented. Broken tiles and slates should be replaced, flashings and counter flashings made tight. Smooth or naked roofs should be coated if necessary and all roof boxes, gutters and downspouts put in shape. It is to do those things throughout the school year that are consistent with weather conditions and do not interfere with the normal use of the plant for regular instructional purposes.

For example, exterior painting and roofing work can be done with school in session with substantially no interference to the teaching program. When a school has space temporarily to house a class other than in its own room, interior painting can be carried on. Because most schools have been provided with a surplus of plumbing fixtures, it is frequently possible to close a toilet room for extensive repairs or modernization without seriously disturbing the routine of the school. School a good time of year to do the needed pointing of brick and stone work to prevent disintegration of the parapets and walls and to reduce efflorescence.

Windows should be gone over carefully, stiles, rails and muntins replaced where weakened, glass puttied, parting strips and stops adjusted for easy operation, sash locks checked and frames calked to reduce leakage. If severe heating problems or draft conditions exist it might be advisable to install weather strips.

Exterior doors should come in for particular attention. The panic bolt should be given special scrutiny, also the butts, door check and hold open device. In most areas the weathering of the outside of these doors is such that they should be cleaned and varnished or painted each year.

The repair and replacement of broken cement sidewalks might well be done during the summer period when traffic over them is lightest. Play areas needing regrading or major construction might well be attended to when organized play is not scheduled. Enclosing fencing of school grounds can be undertaken or repairs made to existing fences. The flagpole should receive special attention to determine that serious disintegration of the base is not under way. Flagpoles should be painted at least every two years.

Inside the building are the routine janitorial matters consisting of the thorough scrubbing of floors and their proper treatment, which differs for each type of surface flooring. Washing or vacuum cleaning of walls is a routine procedure in some systems. Electric light fixtures are especially cleaned, the glassware is

● Many maintenance jobs that would interfere with school routine necessarily must remain for summer attention, although an effort should be made to keep an even flow of maintenance work to keep the staff gainfully employed.

removed and thoroughly washed and dried and new lamps are installed where the old ones are no longer efficient. Wet batteries are to be carefully checked and anticipated replacement made.

Other services that should be put in first-class operating condition are the fire alarm, program clock and corridor bell signal systems and central radio units. Some of these may require the expert attention of the manufacturers or of specialists.

Then there is the matter of caring for the furniture. It is the general custom to have the janitorial force go over all pupil seating and give it a thorough cleaning, usually by washing and drying. When refinishing only is indicated this is frequently done at the school. When repairs or extensive refinishing is desirable, however, some systems send the seats to a central repair shop where the needed machinery and replacement parts are available.

An important item in connection with the summer repair program has to do with the conditioning of the heating and ventilating equipment. The boilers should be cleaned, inspected and left ready for putting into use with a minimum of work once school reopens in the fall. It is advisable that this be one of the first jobs done after school closes. In the absence of complete rules for laying up the boiler, it is suggested that a pamphlet of instructions be obtained from the insurance carrier with which the boilers are insured. When there are boiler feed, vacuum and return pumps, all of these should be thoroughly overhauled and left ready for use. Fans should be cleaned and adjusted as should also all metal ducts and flues. A vacuum cleaner should be used for this when one is available. The painting of the fan housing should be inspected and such parts as are showing evidence of corrosion should be scraped clean and given a coat of rust-inhibitive paint.

Leaky radiator valves and traps should be cared for in the interest of maintaining proper temperatures and for economical operation. The engineer should check on return traps so that condensate can be returned to the boilers rather than wasted to the drain with its resultant heat loss. He should clean the breeching and flue lining of the chimney so that effective draft is not destroyed.

It is expected that before the teachers leave at the close of school in June each will have put the bookcases and supply cupboards in her room in good housekeeping order. Likewise, the school clerk will have done the same for the general supply room of which she is probably in charge.

The janitorial force should, in turn, get its areas into good shape, putting things in order and getting rid of items of supplies and equipment that are no longer to be used because of obsolescence or surplus. If a central storehouse is available, such materials should be sent there for redistribution or junking.

The ideal to strive for in setting up the summer schedule is to put the building, the grounds and the equipment in good repair, suitably safeguarded and clean. Special attention should be given basements and attics, the amount of combustible materials in the school being reduced to a minimum in the interest of fire prevention. Then after school reopens in the fall, the custodial staff must strive to maintain those standards.

When It's Time to Clean

1. **BRASS, NICKEL, CHROME AND OTHER METALS**
   To clean door plates, door handles, knobs, brass sheets, hinges, electric plates, brass handles for raising windows, faucets and metal plumbing fixture parts, apply approved metal polish with a soft rag. Polish until desired luster is obtained.
2. **WINDOW SHADES**
   Window shades of the better grades can be washed. First, wipe the dust from both sides, then wash with a light solution of neutral jelly soap, rinse with clean warm water and wipe dry. This should be done during the vacation periods.
3. **FURNITURE**
   Furniture should be washed from one to three times a year. Apply a light solution of neutral jelly soap with a sponge, rinse with clear warm water and dry. This should be done during vacation periods. If the furniture is scratched, touch it up with furniture stain and finish it with an approved furniture polish.
4. **STEEL LOCKERS**
   Clean steel lockers three times a year. Use a light solution of neutral jelly soap and disinfectant. Rinse with clean water and wipe dry. This should be done during the vacation periods.
5. **RADIATORS**
   Radiators should be washed during the summer vacation. If they are very dirty, a strong solution of neutral jelly soap should be applied until the dirt is loosened, then the radiators should be washed off and rinsed clean with warm water and allowed to dry.
6. **CHEWING GUM**
   Scrape chewing gum with putty knife. Chewing gum should be removed from desks and furniture as soon as it is discovered.
7. **PENCIL AND CRAYON MARKS**
   Pencil and crayon writing on the walls should be washed off immediately. Use neutral jelly soap or a detergent powder and warm water.
8. **DOOR MATS AND FOOT SCRAPERS**
   Door mats and foot scrapers should be kept free from dust and dirt. A vacuum cleaner is the best means for cleaning the mats. In the absence of a vacuum cleaner, clean with a coarse broom or by shaking and carefully beating the mats.
9. **GYMNASIUM MATS**
   A vacuum cleaner is the most advisable means of keeping the gymnasium mats free from dust and dirt. Covers of the mats can be cleaned properly only with soap and water.
10. **INKWELLS**
    Sticky and dirty inkwells mar the appearance of the schoolroom furniture. Remove inkwells from the desks and place them in a pail of water. Run the water from the faucet into the pail and let the water overflow into the sink. After much of the ink has been soaked out, use a strong solution of cleansing powder and allow the inkwells to remain in the solution for a day. This will dissolve the dry ink. The inkwells may be rinsed by running water over them. They should then be wiped dry with a cloth and replaced in the desks.
11. **DRINKING FOUNTAINS**
    All porcelain fountains should be kept spotlessly clean. Grease and marks from the hand may be cleaned with a rag dampened with detergent. Wipe with clean dry cloth.
12. **BRICK WAINSCOTS**
    The burned leather and rubber marks on brick caused by the children kicking their shoes against the wall must be scrubbed with a strong detergent powder until clean.

From "Manual for Custodians," board of public education, Wilmington, Del.

Summer

Vacations for Custodial Staff

THE question of vacation schedules for the custodial staff must rest with the amount of work that is to be done and also the type of work. According to a recent survey made in certain school districts throughout the country, this problem is less vital than formerly because of the tendency to spread the renovation program throughout the year. Spring vacation in many instances marks the beginning of summer maintenance work, with such operations as washing walls and painting completed at odd times and on Saturdays. Thus, by the time that school closes, a substantial head start has been gained.

Most school systems give their custodians two weeks' vacation with pay, assuming one year's service, and for less than one year, a day for each month. Some, however, are more liberal, granting three weeks' pay after one year's service and even an extra week to the employe who has rendered valued service over a long period.

Vacations are staggered for the most part over the period when school is closed, this depending upon the program. The first two weeks in July are favored if the work can be so arranged. If painting is to be done or some similar project contemplated, a substantial number of employes may be given their vacations early or, possibly, they may be held until the job is completed, with time off later in the summer. Personal preferences are considered where possible and also seniority. A skeleton crew is kept on duty so that the buildings are open at least part of the day.

In contrast to this is the plan whereby practically everyone on the custodial staff gets his vacation immediately following the school year. This clears the decks for the summer renovation program, which continues until the fall term. Although not encountered as frequently as the stagger system, this plan has many advocates.

The major part of school repair is done by the regular staff, although when plumbing and heating repairs and plastering are required the work may be put out on contract. Sometimes it is the rule that all operations involving a certain amount or over are advertised and given to the lowest responsible bidders. Every effort is made to keep down expenses by putting on as little additional labor as possible. W.P.A. workers may be used and pupil labor also.

AT FLORAL PARK, N. Y.

Typical of the stagger system is the plan described by K. E. Place, superintendent of buildings, Sewanhaka High School, Floral Park, N. Y.

"I set down the different periods for vacations along with the number of men permitted to go off in any one period," he says. "Then, according to their seniority, the men state their preferences. This works to the satisfaction of all. When a gang is needed for some operation, such as painting, we endeavor to get the men off first or else we defer their vacations until the work is finished. All men are back from their vacations at least two weeks before school opens. More than half of the men are off on their vacation before the second week in July. Each man gets two weeks' vacation.

"Our staff makes all operation and maintenance repairs with few exceptions, such as painting the outside of our tower and the outside window trim, major alterations and repairs to the building structure and some specialty jobs.

"On a few occasions we have brought in two extra men to help with our summer schedule. Often some jobs are deferred rather than bringing in outside help to get them done. Our district, Central District No. 2, has two buildings, a high school and a vocational building, housing at present 2700 pupils. Our custodial force consists of 11 men and one matron."

AT DUBUQUE, IOWA

The same general plan is adopted in the schools of Dubuque, Iowa. George J. Mehl, superintendent of buildings and grounds, reports that there are 24 men on the staff and each one receives two weeks' vacation. There is a ten month school system, which means that the 24 men must take their vacations from approximately June 20 to August 10 in order to be back on the job and start cleaning their buildings.

A large percentage of the repair work in Dubuque, such as painting, plumbing, steam fitting and electrical work, is done by outside contractors, only minor repairs being made by the school staff. The larger repair work is let out on bid according to plans and specifications for the work.

AT KALAMAZOO, MICH.

To adopt the method of vacation cleaning and renovation that will give the best results with the least disruption of the necessary summer activities is the aim of the board of education, Kalamazoo, Mich. Here is how John De Vries, secretary, has solved the problem.

"We allow all of our regular custodians, engineers, carpenters, painters and plumbers two weeks' vacation with full pay. The painters, carpenters, plumbers and repair men are given their vacations either in June or after their work is completed for the summer; in other words, usually in September or October. The custodians are allowed their two weeks sometime during the summer months.

"We use the stagger system, as far as possible allowing the men to choose their own time, taking into consideration, of course, in buildings in which there are two or more men that they must take their vacations

at different periods in order that the work schedule will not be disrupted.

"In cleaning the buildings during the summer vacation period we employ about one and one half boys per custodian, or, in other words, approximately 12 work weeks. We use high school pupils or college students in this work, allowing each boy from three to four weeks' work. In this way we enable a large number of pupils to purchase themselves one outfit of clothing at least for the coming school year."

AT DENVER

Denver is another school system that employs student help. In consequence, its problems are not the same as those of systems that employ adult help exclusively.

In order to provide a general idea of the setup, J. C. Stoy, supervisor of custodians, explains that the school buildings are divided into the following classifications: 5 senior high schools, 10 junior high schools, 1 school for crippled children, 58 elementary schools, 1 day and evening vocational school, 1 warehouse and 1 administration building.

"Our custodial staff," he reports, "consists of 147 men, 21 women and 153 sweeper boys. Sweeper boys are employed to work on an average of two and one half to three hours a day during the regular school session. Their hours are divided so that they work from three quarters to one hour before eight o'clock in the mornings and from one and one half to two hours in the afternoons after school. The morning work is devoted to dusting and the afternoon work, to sweeping and other light jobs. Women are employed in the junior and senior high schools to perform duties in departments that are used exclusively by girls. During the summer the boys are laid off at the close of the regular school session and the women are laid off about two weeks later. The men are employed for the full twelve months.

"Sweeper boys are selected from boys who are enrolled in the five senior high schools of the city and from students of Denver University and Regis College, two local institutions of higher learning. To be eligible for appointment the student must make a passing grade in a normal year's school work and must have a commendable record in citizenship in his school.

"A custodian is permitted to choose the time he desires to take his vacation. There is only one restriction: he must consult with the custodian of the school nearest to his school so that both custodians will not be on vacation at the same time. These custodians cooperate with each other by looking after both buildings while one is on vacation. Custodians are requested to take their vacations before the last two weeks of the summer vacation period. All custodians are in their buildings two weeks prior to the opening of school.

"The length of vacation periods vary. If a man has not been employed for twelve months prior to June 1, his vacation is based on one day for each month of service. After a year's service he automatically receives two weeks' vacation. If a custodian desires to take an extended trip he is usually granted an extra week and if he has given long and valued service to the district the board of education will grant him four weeks' vacation upon his application and upon approval of the business manager. Legal holidays are not included as vacation time.

"All vacations are with full pay. Custodians are encouraged to take extended trips and, if possible, to visit custodians and school plants in other parts of our country.

"The custodial force in each building takes care of laying away boilers, packing valves, cleaning motors and making other minor repairs to the heating plant. They wash walls and ceilings; paint toilet room dadoes and partitions; varnish toilet seats, window sills, chalk trays, and desk tops; seal floors; irrigate lawns, shrubbery and flowers; cultivate shrubbery and flower beds, and mow lawns.

"Major repair jobs are handled by craftsmen of the different trades who work under their foremen from our school shop. In some instances the painting of an entire building is let on contract. During the regular school session the painting of elementary schools is done by our regular paint crew. Also touch-up jobs are done by this crew in all the schools during the school year.

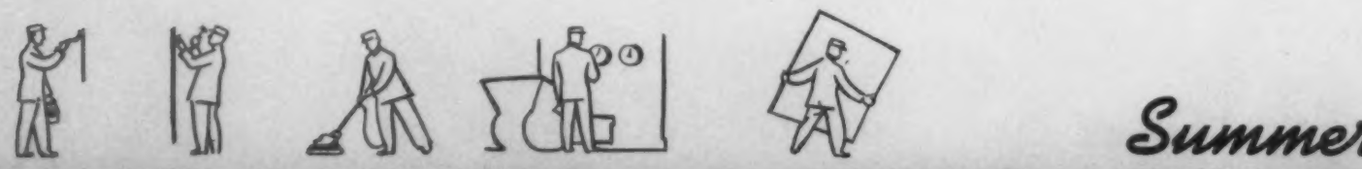
"We endeavor to keep our buildings in shape at all times; consequently, we are washing walls, ceilings and windows during the entire school session. Any area that is inconvenient to clean thoroughly during the school session must be postponed necessarily until a vacation period. Most of our schools start their cleaning at spring vacation and keep continually at it during odd hours and on Saturdays until it is completed. In this way practically all walls and ceilings are cleaned before school closes. We have never found it necessary to employ additional help in the buildings for summer cleaning purposes."

AT EAST CLEVELAND

We now hear from a school system that after many years of operating on the stagger vacation schedule has given it up in favor of a plan whereby practically the entire staff is absent at the same time. W. M. Councell, business manager, East Cleveland, Ohio, is enthusiastic over the results since the change was effected three years ago.

"For many years," he says, "all of our business department employes (custodians, maintenance employes and office staff) took their two weeks' vacation on a staggered schedule. We laid out a large table with a two week period starting June 15 across the top of the sheet and the names of all the employes listed down the left edge. Vacations were then assigned to allow only so many to be away for each two week period. The individual and his corresponding vacation period were crosshatched on the table. Under this stagger system all the employes completed their vacations by September 1.

"This method never seemed to be ideal, especially as it affected our maintenance employes during our summer renovating program. The man we needed for certain work in our program always seemed to be away at the wrong time and his absence slowed down or stopped the work of other tradesmen. With



plumbers, painters, carpenters, steamfitters, electricians and other skilled help away at different intervals, repair work never progressed according to the schedule planned. Some key man was always missing when needed the most.

"Three summers ago we adopted the following plan which has proved to be far superior to the old method: On June 15 we send our entire maintenance and custodial staff, except for a truck driver and one man left at each building, on a two weeks' vacation. When they return on July 1 we can then really start our summer repair and renovating program with practically all the staff available every day throughout the rest of the summer vacation period. Those who stayed on through the June 15 to July 1 period are then given stagger vacations over the rest of the summer without curtailing or restricting our summer maintenance program."

AT WHITE PLAINS, N. Y.

Much the same system is being organized in the White Plains public schools, White Plains, N. Y. "In the main," according to Francis C. Buros, assistant superintendent, "the custodial staff takes its vacations during the first two weeks of July. In the larger buildings one man is retained on duty in order to keep the building open during this period for the purpose of receiving supplies or other material that may be delivered. Practically all work is done by the school staff with the exception of some work in plumbing and heating repairs and plastering. This is done through contracts."

AT LOS ANGELES

In Los Angeles, three weeks' vacation is given to twelve month employes and five days' vacation, to ten month employes. H. M. Chellis, director of operations, explains that head custodians who receive three weeks' vacation exchange with other schools in the near vicinity, allowing each school to be open one half day during the summer vacation. Vacation dates are set so that all schools will be open a portion of the day. Ten month employes receive five days' vacation during the Easter or Christmas holidays.

All custodial work in Los Angeles schools is done by the staff. The additional help needed during summer vacation is selected from the ten month employes. This additional help may be caused by special summer school, adult education classes, national defense, National Youth Administration and special training classes for teachers. Total number of custodians receiving three weeks' vacation is 383 and the total number of custodians receiving five days' vacation is 1037.

AT PHILADELPHIA

Charles G. Calhoun, chief of plant operations and maintenance, school district of Philadelphia, enumerates the following rules that are observed in that city:

1. All employes in the custodial service who have been employed for a period of one year or more are entitled to a vacation.

2. The city is divided into six districts, each of which is under the supervision of a district engineer. It is his duty to schedule the vacation periods of all employes in his district.

3. Vacations in the custodial force are arranged so that the building is always under supervision. In the senior and junior high schools the first assistant is in charge during the absence of the custodian.

4. When summer repairs require contract work in the elementary schools during the period the custodian is on vacation, a per diem emergency engineer is assigned.

5. Because of the system established, the additional cost to care for buildings during the vacation period is negligible.

6. All custodial work is done by the present staff. Reports are made by the per diem force, except in cases in which the amount exceeds $600. This work is advertised and awarded to the lowest responsible bidder.

AT PORT CHESTER, N. Y.

In most of the school buildings in Port Chester, N. Y., two men are employed who take their vacations any time during July or August, but not both at the same time. Each janitor gets two weeks' vacation. "The work is done by the staff," Walter J. Scott, superintendent of buildings and grounds, states, "with extra work, such as painting, done with the aid of the W.P.A. workers. No other help is required."

First Aid for Floors

JOHN W. BROWN
Business Manager, Elizabeth, N. J.

THERE is, perhaps, no part of the school building more neglected or abused than the floors or floor coverings. In many cases they are left to the custodian and his assistants but the custodian cannot be too severely criticized when in reality the fault lies with the school board or its representatives, who may neglect to set up a standard and to provide the necessary supplies and equipment.

Wood Floors

It is difficult to describe a method for the proper care of floors because of the many different types of wood floors and coverings. In the care of wood floors it is common practice to use approximately 16 quarts of water to clean one classroom floor. This is not only unnecessary and harmful to the floor itself but it is likely to cause deterioration to the rough underflooring and sleepers.

Another common practice is to cover the floor with crude oil, which is equally dangerous. A single classroom floor will absorb from 10 to 12 quarts of oil and this amount applied once or twice each year creates a fire hazard, as the dropping of a lighted match would almost immediately ignite the floor. Moreover, the oil treatment creates a dirty and unhealthful condition because floor oil absorbs dust and dirt that cannot be cleaned off by sweeping.

Oiled floors should be eliminated; this can be done in time by periodic scrubbing with warm slightly soapy water and by rinsing with a wet cloth or mop. Powdered oil solvents also may be used to extract the oil.

Maple floors may be kept in good condition with commercial preparations to be used with an electric scrubbing or burnishing machine. This is better practice than refinishing floors and then applying two or three coats of floor seal, which produces a fine appearance when finished but is soon worn off where the traffic is heaviest. Worn parts may be recovered with seal but then the floor must be treated with steel wool to remove overlaps; even so, it is almost impossible to conceal all evidence of overlaps.

Terrazzo and Marble Floors

Any proper cleaner for terrazzo and marble surfaces may be applied to these surfaces in proportions of 5 ounces to 14 quarts of water. This mixture should be spread with a wet mop and allowed to stand on the floor for a short time before scrubbing it with a machine or a deck brush. The dirty water should be removed and the surface should then be mop rinsed with clean water, making sure that the mop is cleaned frequently, and dried with a mop wrung tightly from clean water. Soap in any form should not be used.

Gymnasium Floors

If a glossed finish has been applied to a gymnasium floor, then the burlap system of sweeping is recommended. This is done by dipping a clean burlap bag in a good grade of floor cleaner, wringing it thoroughly, laying the damp burlap lengthwise on the floor and fastening it to a 36 inch broom. Then the broom is pushed down the floor, allowing the burlap to drag. When the burlap becomes dirty under the broom, the broom is moved back a few inches. The floor should be sprayed with a good grade of floor dressing once each week and this should be spread with a yarn broom.

Linoleum seal may be preserved by thorough scrubbing, then by waxing.

Special orders should be given to prevent the use of street shoes on gymnasium floors. If "sneakers" are not available, the shoes should be removed and the pupils allowed to play in their stockings. The application of floor wax should not be permitted.

Linoleum Floors

All good linoleum is sealed before it leaves the factory and, to preserve the linoleum, care must be taken to retain the seal. If linoleum is scrubbed with soap or soap powders it will in time deteriorate, causing cracks, and will be difficult to maintain. Linoleum should and must be waxed to retain the original seal. This will keep out dirt and grease and, of course, enhance the appearance. Before linoleum is waxed, it must be cleaned thoroughly with a good grade of cleaner mixed with water and spread on the floor with a mop ahead of the scrubbing machine. The scrubbing machine should be equipped with a fiber brush with No. 1 steel wool attached. A deck brush may be used if a machine is not available. After it is rinsed with clean water all surplus water should be removed from the floor and it should be allowed to dry.

There are many wax preparations on the market but a water wax is recommended. As it will not turn white under water, it can be used on large areas and the floor can be used thirty minutes after the application. This wax is applied with a large mop in two coats, allowing sufficient drying time between coats. It should be applied thinly to prevent slipping accidents. For ordinary wear, the wax may be applied twice each year.

This type of floor is easily maintained by sweeping with a yarn broom or a good grade of bristle brush. If vacuum cleaners are used, the floor tools should be equipped with felt pads.

Summer

Cutting Cleaning Costs

W. A. DAVENPORT

Superintendent of Buildings and Grounds
Michigan State College, East Lansing

THERE is little doubt that sanitary conditions in the home, office, factory or school affect the mental and physical conditions of everyone. Orderliness of physical surroundings has an important relationship to orderly mental processes. The absence of dirt and dust and the presence of proper temperatures and good ventilation are important conditions for the best mental activity and a classroom is the center of mental training.

Clean and well-lighted classrooms and toilets have only to be contrasted with dirty, dark and foul-smelling rooms, poorly ventilated, to reveal forcibly the influence of cleaning upon school morals, school morale and school discipline. This holds true for the faculty and employes as well as for the pupils.

A custodian has little trouble in maintaining a building clean and in order, if it is kept in proper repair. If a building is allowed to go without redecorating, if the roof is not in repair and plastered walls need patching, the janitor, pupils and faculty members find that the unpleasant surroundings are detrimental to academic progress as well as injurious to health.

Regarding the financial investment, this point may be brought out clearly by quoting an official of the Michigan State Department of Education a few years ago. He said that the "second largest investment in any one industry in Michigan is in school buildings."

When compared to the automobile and other manufacturing trades, not to mention the many agricultural products of the state, we realize that buildings for educational purposes represent an exceedingly large investment. Therefore, we should realize, by this comparison alone, the extent of our responsibility. It is our duty, as maintenance superintendents, to make tireless efforts in improving conditions involved in our repair and service duties. We are obligated, as good citizens, to maintain the best

Excessive cleaning costs may be reduced by use of vacuum cleaning equipment.

of living conditions in classrooms and offices. However, we must keep our operating costs down to the basis of a good investment. We may spend much, or spend little, on a certain operation, but the question remains: Was it a good investment?

Back in 1930, for example, Michigan State College changed its brooms and dustpans for vacuum cleaning equipment. Floor cleaning had been done with brooms. Not only was the cost high per square foot of floor area but many of the buildings lacked a clean and sanitary appearance.

In 1929 cleaning costs were excessive compared to other buildings and grounds service costs. They averaged about 8½ cents per square foot per year. By 1937 the floor area had increased to 900,000 square feet but, owing to the new cleaning system, the annual cost was only $46,470. Most of this decrease in expense of cleaning was, in general, the result of the vacuum system. To increase the floor area about 67 per cent and decrease the unit cost per square foot from 8.62 to 5.15 cents per year had not been anticipated back in 1929 and 1930.

This was accomplished by making two major changes. The first was the elimination of personal service to the faculty which did not pertain to cleaning, better known as "valet service," and the second, the use of vacuum equipment. The minor changes and their effect on costs will be noted later.

Instead of transferring the dirt from the floors to the walls, woodwork and furniture with a swishing broom in the hands of an elderly and poorly trained man, it was removed by placing younger men on the business end of vacuum cleaners. In 1929, the cleaning division consisted of 33 men whose age average was over 60 years. It is granted that these men might be more responsible

Instead of transferring dirt from the floors to the walls, woodwork and furniture with a swishing broom, it has been found that cleaning operations can be achieved much more easily and effectively by either the direct suction vacuum system, shown at left, or by a portable vacuum cleaner, as is shown below.

in many ways than younger men but they were not physically able to do as much work.

The introduction of vacuum units was an unpopular move with several of the older employes. They had used brooms so long that sweeping had become not only a habit but a campus tradition. Then, too, they preferred nine hours during the regular working day, much of which time was spent in being a handy man for the faculty members. The vacuum work at night or during the early morning hours on a strictly maintained schedule cramped not only their style but their muscles as well.

Vacuum sweeping can be done only before morning classes, during the noon hour or in the evenings after 5 o'clock. With a decided change in working hours, the use of different equipment and irregular schedules to follow, several janitors fell by the wayside. Our policy was not to discharge these old employes unless they continually refused to keep on schedule. Some were transferred to other buildings and grounds divisions or into other buildings where they fitted into a particular cleaning situation.

When vacuum units were first introduced many janitors could not see the reasons for a change from the push broom type of sweeping.

Therefore, a demonstration was conducted for their benefit.

This test was run in a typical classroom containing 613 square feet of hard maple floor. It was equipped with 34 pedestal seats, a desk and chair. This room was chosen from many others because the cracks in the floor were relatively small.

Following the day's classes one of the regular janitors for that building was timed while doing his broom sweeping. For this test he did not use sweeping compounds. It took nine minutes and he obtained 2 ounces of dirt including a gum wrapper. Immediately following this a new commercial fan type of vacuum cleaner was used. The dust bag was new and the operator was experienced in handling the unit. It took exactly eight minutes to remove an additional 13 ounces. This meant more than six times the amount removed by broom and it was done in one minute less.

The cleaning budget decrease in 1937 over that of 1929 amounted to $4586 and included the additional care of 300,000 square feet. This was accomplished in the following manner:

1. Drastic changes to decrease the academic and personal service system to the faculty and other college employes. Employes now do only that work that pertains directly to cleaning. The packing and moving of books, equipment or other departmental properties are done only when work orders are issued against the account of the academic department requesting assistance for something other than cleaning.
2. Change from the use of brooms, dustpans and sweeping compounds to vacuum cleaning equipment.
3. Adoption of regular working schedules. This change has decreased the man hours during the regular working day and has increased the working hours during early mornings and evenings.
4. Individual training of all men.
5. Gradual replacement of older men with young men physically fit for assigned duties.
6. Reconditioned floors. All of the dark, oily film was removed and the floors were treated with penetrating seal and finished with wax. In most cases only water wax was used but in some areas paste wax was buffed in and given a final coat of water wax.
7. Assignment of one portable vacuum unit to two or three small buildings. By working the machines on an average of more than eight hours per day the investment in vacuum units is kept at a minimum.
8. A central delivery system for cleaning and toilet supplies. The old system allowed each of the 33 janitors to obtain their supplies individually each day. The new system needs the time of one man and a small delivery truck one half day a week. This, alone, saves about 100 man hours per week.

Summer

A Check on Safety

LEONARD F. MAAR

Safety Research Institute, New York City

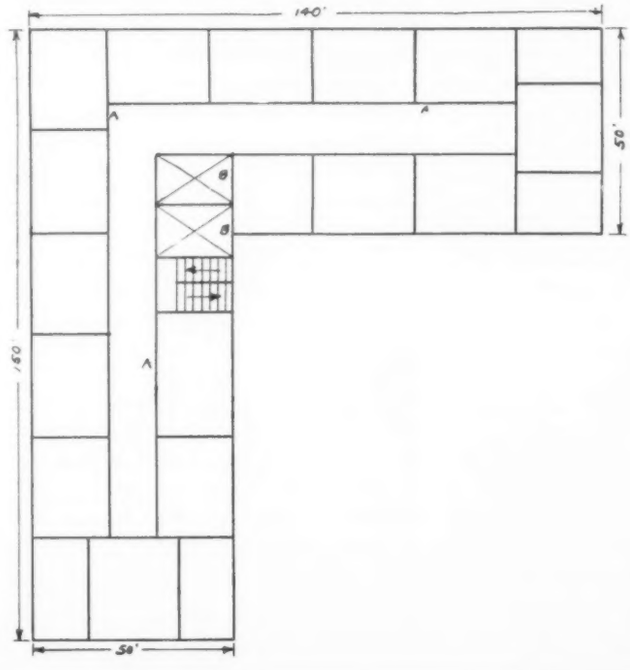
THE control of accidents and fire is a matter of constant concern for school executives but the summer vacation offers the best opportunity to take really constructive steps to ensure the safety of pupils and the teaching staff.

Legally, the ultimate responsibility for safety is with the board of education or trustees. Actually, the real safety engineer is in most cases the school custodian, who is thoroughly familiar with every danger spot in his building. During the summer when silence hangs heavy in the corridors and classrooms, the custodian has an opportunity to inspect, test, repair and replace equipment and plant facilities.

In making a conscientious approach to this job, the custodian will

During the summer when silence hangs heavy in the classrooms and corridors, the custodian has an opportunity to inspect, test, repair and replace equipment and plant facilities. Among other things, he must inspect all gas connections to make sure that they are tight and that no gas is escaping anywhere.

Fig. 1—In a fire-resistant building in which ordinary classrooms are to be protected, soda acid fire extinguishers may be located according to the plan illustrated below, with one 2½ gallon unit within 100 feet of travel distance from any point and at least one extinguisher for each 5000 square feet of floor space at locations marked "A." "B" indicates that there should be one vaporing liquid extinguisher for elevators.



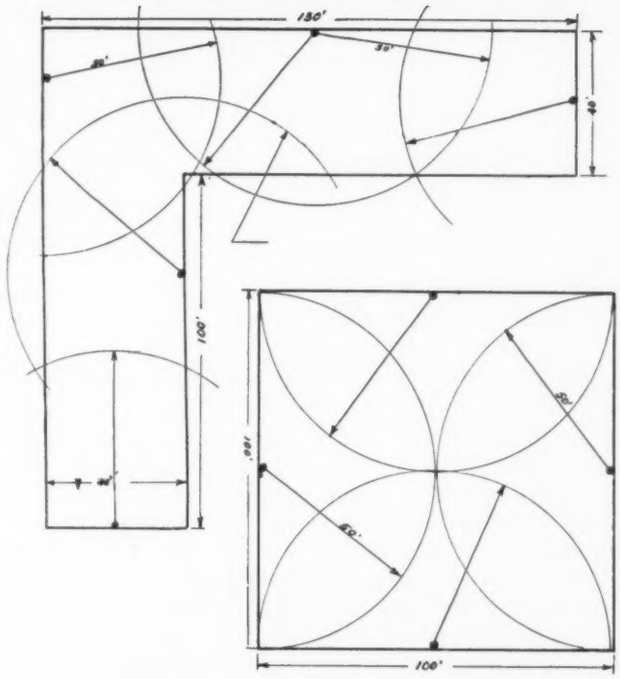


Fig. 2—In schools that are not fire-resistant, there should be one 2½ gallon extinguisher for each 2500 square feet of floor space and within 50 feet of travel distance from any point. Note that five extinguishers are needed for the L-shaped area but only four for the square area.

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do well to plan his work from two directions, considering fire safety and other accidents separately.

Fire prevention begins with good housekeeping. It is a good rule to permit no storage of furniture or other equipment in the building and the summer is a good time to get rid of such junk.

The boiler room should be made shipshape. Pipes, flues and stacks should be inspected, cleaned and repaired, if necessary. Fans and motors should be cleaned.

If there is painting or finishing of desks and seats to be done during the summer, special attention should be given to the storage of material. Do not leave this matter up to the painters. Check up on them frequently to make certain that paint rags are disposed of and that solvents, thinners and other flammables they may be using are carefully handled.

If wood floors are to be scraped in any part of the building, take charge of the disposal of the scrapings. Before burning it in the incinerator or boiler, place such material in bags; if it is thrown openly on the fire there is danger of an explosive back-flash.

Inspect all cords on electrical appliances and replace those that are worn or frayed. This applies to offices, teachers' rest rooms and all other departments. All extensions or alterations of electric wiring should be made by a licensed electrician.

Scrape out vent pipes leading from hoods over ranges in kitchens or burn them out if possible.

Inspect all gas connections and make certain they are tight.

Inspect and recharge all fire extinguishers. There are instruction plates on all types of approved extinguishers and the directions should be followed exactly, using recharging materials and replacement parts furnished by the manufacturer.

Since this first-aid equipment is so vital, it may be well to determine if the equipment on hand is sufficient. Where there are special hazards, as in trade shops, laboratories, kitchens and domestic science laboratories, there should be extinguishers of suitable types within the rooms in which the hazards exist.

Fire prevention begins with good housekeeping. If wood floors are to be scraped, the custodian should dispose of the scrapings properly.

These should be placed near exits so access to them will not be cut off by fire.

If the school building is of fire-resistant construction, it will be sufficient to provide extinguishers according to figure 1 in corridors outside ordinary classrooms. If the building is not fire-resistant, a greater degree of protection will be needed and extinguishers should be located according to figure 2.

All exit doors should be inspected to make certain that the panic bolts are in good order so that chains or additional locks are not necessary.

Fire escapes should be inspected for rusted braces and cross supports. Deterioration because of rust can be halted by a coat of red lead topped with a suitable outdoor paint. Windows within 10 feet of fire escapes should, of course, be of glazed wire glass.

Unlined linen hose, commonly used on standpipe connections, deteriorates if it becomes wet. In the summer it should be taken from its rack and inspected. Valves should be inspected for tightness at all hose stations. New gaskets can be installed in the couplings and at hose nozzles and valves if they show signs of deterioration. The fire department will be glad to assist in testing standpipe systems, using rubber lined hose to flush out the risers.

The fire alarm system will have been tested at suitable intervals during the year at fire drills, of course. Improvements or extensive repairs can be made during the summer.

Automatic sprinkler systems also should be checked over and all valves inspected.

All walkway surfaces should be inspected and repaired if necessary. Loose tiles and sealing strips should be fastened in place. Worn floor covers should be patched.

Treads on stairways should be in repair.

Handrails should be inspected and reanchored to walls or palings as needed.

A check list of precautions that need to be taken with miscellaneous equipment will include the following:

Inspect desks and seats for splintered wood and loose bolts.

Consider marking exits or directions to exits.

Inspect and repair playground equipment and bleacher seats.

Replace broken porcelain hands on drinking fountains and faucets on wash bowls.

Inspect walkways and duck boards in lockers for splinters.

See that lockers are anchored firmly to the floor and that the sharp edges of locker doors are ferruled to prevent cuts.

Examine outside walks and steps and repair them when necessary. Consider painting risers on outside steps a light color to improve visibility.

Consider improvements in sterilization of shower room floors and toilets.

There are a few statistics that may help in considering the various aspects of school safety. One third of the accidents happening in the school building occur in the gymnasium. Only 20 per cent occur in halls and on stairs. Fifteen per cent happen in classrooms, 14 per cent, in shops and the remaining 18 per cent are scattered in various locations throughout the building.

Summer

The type of playground surfacing to be used is usually determined by the requirements for a particular area.

Points on Playgrounds

DONALD D. CUNLIFF

Construction Engineer
Los Angeles City School District

IT IS obvious that if a playground surface is to be entirely satisfactory it must be adapted to and suitable for the physical educational program proposed.

While recreational leaders are not in entire agreement as to the merits of the various surfacings available, the final judgment of the surface rests entirely upon the extent to which it meets this test. The fact that no one surface provides all the qualities desired makes the question of selection a difficult problem. It is, therefore, advisable to decide which are the most important qualities for a particular area and to adopt a surfacing that will most nearly meet these requirements.

From a paper presented before the Business Officials' Association of the State of California.

The following qualities are generally considered important, to a greater or less degree, in a good playground surface:

COST: The surface should be reasonable in cost of construction and maintenance. Frequently, the more expensive the original surface the less the annual maintenance cost. The item of cost must also include the effective playing time and the varying uses for which the playground is available.

DURABILITY: The school playground cannot be considered satisfactory unless it is able to withstand considerable wear without repair or replacement. It must have lasting qualities and be firm enough to hold up under sudden and severe shocks.

RESILIENCE: The surface must have sufficient resilience or elastic qualities so as to eliminate any considerable shock to the players or wear on the area. The longer the playing period the more important this quality becomes.

NONABRASIVENESS: Both children and adults are bound to fall while playing and the surface should be of such texture as to reduce abrasions.

FIRMNESS: A firm surface is needed for many types of play activities. A sure footing is important. Too, the surface must not be easily affected by hard and frequent shocks.

FREEDOM FROM DUST: The playground surface should be compact

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enough to prevent excess dust as it is both unhealthful and unpleasant to play on areas that are dusty when dry.

CLEANLINESS: The surface not only should be free from dust but should not injure clothing or soil excessively either persons or clothing coming in contact with it.

SMOOTHNESS: The surface should be comparatively free from irregularities and rough spots; on the other hand, it is important that the area does not become slippery when wet.

GOOD DRAINAGE: The surface should be such that water will be drained off quickly and in such a way as not to wash out the surface. At the same time it cannot be too porous or it will not be firm or free from dust.

UTILITY: The surface should be suitable for a great variety of uses and under varying weather conditions. It should also be suitable for play with either rubber soles or ordinary street shoes.

GOOD APPEARANCE: The surface should present a neat appearance and should facilitate play by indicating its suitability. Glaring surfaces should at all costs be avoided because of the resulting eyestrain.

In addition to the use of graded natural earth without any particular surfacing material, school districts use a wide variety of materials for surfacing playgrounds. Materials in commonest use include sand, gravel and clay in various combinations, turf, cinders, crushed stone, slag, loam, concrete, various types of bituminous materials as well as a number of miscellaneous materials that are used to a minor degree.

The National Recreation Association's playground surfacing committee in its report of October 1939 grouped these various surfaces into the following broad general classifications: turf, sand-clay, crushed stone, bituminous surfaces, concrete, miscellaneous.

Turf is generally conceded to be the ideal surface for almost all forms of children's play, as well as for many highly organized games for youths and adults. It is generally used in many of the large playgrounds in the public parks and recreational centers but its use is not practicable on intensively used playgrounds of less than 2 or 3 acres as it is almost impossible to maintain it without periods of rest for the recovery of the turf.

The use of turf has been generally restricted to park playgrounds in which it is used intensively for only a comparatively few months of the year and is seldom found on school playgrounds that are needed practically the year round.

The use of turf is also largely dependent on climatic conditions as in some sections of the country—for instance, in parts of Minnesota—it is easy to grow grass as the natural soil conditions apparently favor its growth. On the other hand, in the greater part of California the expense of maintaining turf areas is generally so great as almost entirely to eliminate its use in favor of other types of surfacings.

The disadvantages in the use of turf as a playground surface are due mainly to the fact that it is not suitable for play when the grass is wet as it then becomes entirely too slippery and it also is easily damaged. In cold climates turf cannot be used when the ground is thawing without serious harm to it. Many games that require an accurate bound of the ball or a sure smooth footing may better be played on other surfacings.

The use of sand-clay surfaces of some type or other seems to be general in most of our cities. Many of these surfaces are apparently giving a high degree of satisfaction during most of the year although a great majority of them cannot be used to any large extent during wet weather or in cold climates when a frost is leaving the ground.

In some communities this material is manufactured from local materials readily available at nominal cost in which combinations of sand and gravel are mixed with clay. The success of these manufactured materials is largely dependent on the texture of the clay utilized and it has been indicated that clay with a content of about 30 per cent sand produces the most desirable results.

Communities in which agricultural slag or blast furnace slag is available also have used this material in combination with clay with satisfactory results. However, attention should be called to the fact that it is not desirable to use slag from copper furnaces as its metallic content makes it unsuited for playground surfaces.

In most parts of California, decomposed granite, which is a material of natural sand and clay combination, is available at comparatively small expense and has been used with considerable success by many communities.

The main disadvantages in the use of this type of material are that it will generally show ruts after rain and cannot be used for play purposes until thoroughly dried. For best results, the material should be dragged or rolled after each rain.

Various types of crushed stone surfaces are in fairly general use

Schedule for Mechanical Equipment

BOILERS
- Clean breechings
- Clean stack pits
- Sweep front and rear heads
- Clean tubes
- Clean combustion chambers
- Clean shell of boilers
- Clean ash pits
- Clean grates
- Mark manhole and handhole plates; do not destroy gaskets
- Remove water gauge glasses and plugs from boiler to water column
- Remove steam gauges. Leave in accessible place for testing
- On down draft furnaces, remove two brass plugs from front drums also all handhole plates from rear drum

PUMPS AND ENGINES
- Remove all old packing from valve and piston rods, both steam and water ends

FANS
- Thoroughly clean all fans, fan housings and air ducts, both inside and outside

MOTOR GENERATOR AND ELECTRIC DRIVEN AIR COMPRESSOR ON BOILER FEED PUMP
- Remove old oil from bearings by removing drain plug
- Clean bearings by flushing with heated motor oil
- Replace drain plug and fill with new motor or bearing oil
- On bearings using hard oil, fill grease cups at least three times and turn down so bearings will have clean grease

AIR WASHERS
- Clean and thoroughly drain settling tank, eliminator plates and all parts of washers

RECEIVING TANKS AND HOT WATER STORAGE TANK
- Remove manhole plates and clean thoroughly inside and outside.

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throughout some sections of the country although these surfaces are undoubtedly open to criticism. Playgrounds are sometimes covered with a layer of coarse sharp stone, which provides a loose surface on which it is difficult to play active games and which cuts and bruises children who fall upon it. This type of top surface for playgrounds should be avoided although there are various types of stones that may be used satisfactorily when a sufficient quantity of fine binding material is included.

Good results may be obtained from the use of limestone screenings. This type of surface has the advantage of having good binding qualities if sufficiently fine screens are provided. The screens form a compact surface and, as they are fairly porous, the playgrounds may be used immediately after a rain. The surface may be used for year round play although it is open to the general objection that great difficulty is experienced from dust. The material generally packs too hard and some glare from sunlight is likely to be experienced.

Various types of bituminous materials have been used for playground surfaces and during the past few years their use has increased rapidly and indications point to even greater use in the future. These materials are particularly adapted to small intensively used playgrounds and for all special game courts, such as tennis, handball and volley ball.

The advantages apparent from the use of these materials are that the playground can be used throughout the entire year; it can be used immediately after a rain; the expense of maintaining it is almost negligible; repairs to cracks or depressions may be readily made, and the surface can be played upon with any kind of shoes.

Moreover, a bituminous surface is suitable for practically all types of games and activities and permits faster and more accurate play than clay or other surfaces unless the latter receive continuous maintenance. Another good feature is that permanent lines marking the boundaries of various game areas may be painted directly upon the surface.

Some objection has been advanced

to the use of bituminous materials on the grounds that they are abrasive, nonresilient, dirty, absorbent of heat and unpopular. As exactly opposite claims have also been offered it appears that there is a wide difference in the types of this material available. As its use is likely to become more widespread it is important that the relative merits and disadvantages of the different kinds be given careful study.

Some districts also have used a type of cushion surfacing which includes sawdust, granulated cork or other highly resilient materials as an integral part of the mix and which is applied as a final seal coat to the surface. Some consideration possibly should be given to the use of these cushion surfaces for small areas, such as kindergarten play yards.

Most recreational leaders are in agreement that a concrete surface is not satisfactory for general playground purposes because the surface is entirely too hard, lacks resiliency and is likely to prove harmful to the feet and ankles of the children who play on it.

However, concrete is being increasingly used as a surface for special game courts, such as tennis and handball, and, while it is recognized that there is objection to these courts, it is generally felt that the effect of the hard surface may be eliminated if thick soled rubber shoes are worn by the players. In addition to its other disadvantages, the concrete is extremely difficult to repair. The cost, too, is generally greater than for most other types of surfaces.

A considerable number of miscellaneous types of surfaces are being used; an example is sawdust, which is employed on surfaces in some districts close to lumber communities. The somewhat successful use of a stabilizing agent, such as asphaltic emulsion or cement, also has been reported and it appears that with further experimentation the stabilization of soils may prove a solution to some of this problem. Tremendous strides are now being made in this direction, according to the Bureau of Air Commerce, for use in the construction of runways for airports.

Brick paving also has been used to some extent in the past although this material is not much used now as the surface is not entirely desirable and the cost is excessive.

Equipment in Summer Attire

FRED P. REAGLE

Secretary, Board of Education
Montclair, N. J.

THE first stop on our summer preparedness tour of the Montclair school system, Montclair, N. J., is the commercial department. What will happen to the typewriters and office machines when school shuts down, those machines that are not used by pupils during the summer school?

Most of the typewriters are merely covered with regular typewriter covers. Other machines have covers, too, but, in addition, are moved into a room that remains locked and unopened during the summer. In this way there is no danger of the summer school pupils injuring the machines by attempting to operate them when they know nothing about them.

Next comes the household arts department, in which we proceed to make the following notes:

HOUSEHOLD ARTS DEPARTMENT

Costumes: Cleaned, sprayed and packed.
Woolen and Felt Pieces: Sprayed with moth preventive.
Curtains: Cleaned and packed.
Furniture: Cleaned, sprayed and covered with old newspapers.
Scissors: Sent to central office for sharpening and then stored in dry place.
Sewing Machines: Cleaned, oiled and nickel surfaces coated with petroleum jelly.
Ironing Boards: Padding removed and good part washed.
Cupboards and Boxes: Cleaned.
Gas Stoves: Cleaned thoroughly and oiled.
Ice Cream Freezer Cans: Coated with oil.
Tin Utensils: Stored in dry place.

Two rooms are used by the clothing department, one in the basement and the other upstairs. All equipment that might rust is moved to the upstairs room, then the following procedure is observed:

SEWING EQUIPMENT

Sewing Machines: Cleaned and oiled by teacher in June; checked by man from machine company in September.
Scissors and Pinking Blades: Sent to be sharpened in June. Returned to school and put in clothing room by janitor.
Drawer and Locker Space: Sprayed in June.
Fabrics (used for illustrative material): Packed with moth balls in June.
Books and Charts: Packed in lockers.

The storage of science equipment does not present a difficult problem. Most of the minor pieces of apparatus are left in the cases and on the shelves where they are kept during the school months. Expensive or fragile pieces of apparatus are given special attention. Microscopes are stored in glass front supply cupboards, which are kept locked during the summer. Analytical balances are similarly stored. Fragile physics equipment is packed in drawers or placed in demonstration cases where it is locked up.

The accompanying seven rules are followed in the care and protection of tools and machines.

CARE OF TOOLS AND MACHINES

1. Check to see that tools borrowed by other departments and individuals are returned at least two weeks before the end of the school year.
2. Sharpen all tools that can be sharpened in the shop.
3. Collect and send all special tools that must be sent out for reconditioning. Tag and make a record of them before they are sent out.
4. Wash belts with warm water and naphtha soap.
5. Store belts or at least remove them from the pulleys to avoid stretching.
6. Recondition all tools and machines.
   - Remove all rust and stains with emery cloth and oil.
   - Wipe clean.
   - Coat all parts not covered with paint with heavy grease or furniture wax.
   - Store in drawers or tool room.
   - Rehandle hammers and chisels.
   - Wipe all painted parts of machines with oiled waste.
   - Repaint all machines from which the paint has chipped.
   - Replace broken fire clay or bricks in forges or furnaces.
   - Repair switches and switch handles.
   - Oil all bearings and motors.
   - Redress all grinding wheels.
7. Arrange tools so they will be safe from borrowers during the summer months. If workers must use the shops, it is a good plan to leave a second best set of tools available and lock up the best ones.

A glimpse into the printing department reveals that all machines, such as presses, cutter and stitcher, are taken apart, cleaned and all metal parts are oiled with a heavy oil or grease. The type galleys, composing sticks and all tools subject to rusting during the summer are cleaned and oiled. Printing press rollers are given a heavy coating of oil to prevent the rollers from absorbing the moisture.

In the manual training department bright metal parts are given a good rub down with floor wax to keep them from rusting; it is easily removed in the fall. Before applying the wax, all rust spots should be taken off with an emery cloth.

Musical instruments owned by the high school or by the board of education are stored in cabinets at the high school. Instruments owned by individual junior or elementary schools are taken care of in those schools. Drum heads and strings are loosened and valves are pulled to prevent "freezing."

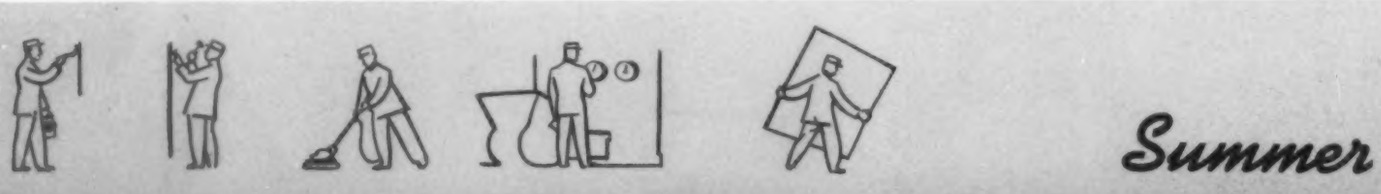
STORAGE OF BAND UNIFORMS

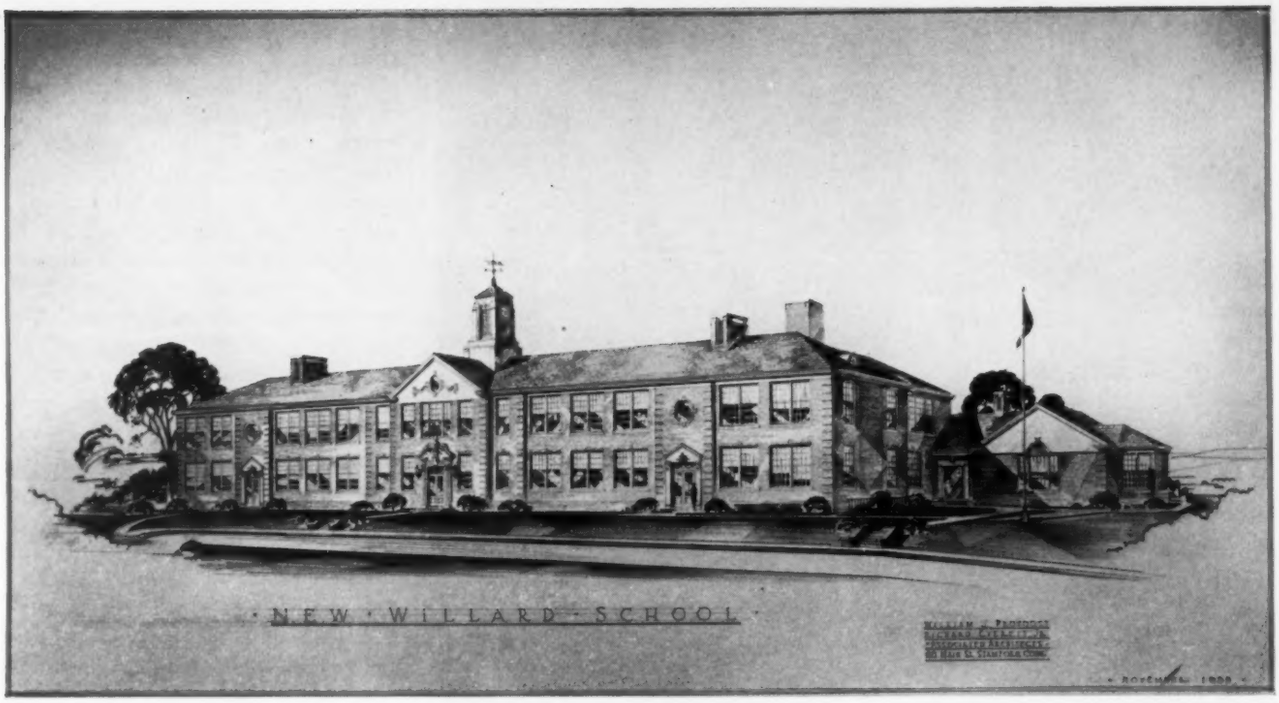
Band uniforms have been taken care of in two ways in the past: (1) sent out to be cleaned and stored for the summer or (2) stored in cabinets, treated against damage from moths and cleaned either before storage or before being used in the fall. Of the two ways the first is preferable but, of course, is more expensive.

At the close of each season all high school athletic equipment, such as football, basketball, soccer, baseball and track suits, is packed and shipped to a commercial cleaning firm by one of the firm's representatives.

All the suits are cleaned, repaired and put in first-class condition. The equipment is packed in moth flakes and stored in the firm's warehouse until delivery is requested by the school.

The football and soccer equipment is usually returned in June and is stored in the original cartons by the school until fall. The track, basketball and baseball equipment is returned about the last of October and stored by the school until needed.





This Rural School Serves City

LEON C. STAPLES
Superintendent, Stamford, Conn.

THE new Willard School is a consolidated rural school serving elementary children in an area comprising nearly two thirds of the entire Town of Stamford, Connecticut. With the exception of about 50 pupils living in the immediate vicinity, the entire school population is transported by bus.

The school is located on an 8 acre tract of ridge land, well back from the highway. A large circular driveway in front permits pupils arriving by bus or automobile to load and unload on the grounds in complete safety from traffic hazards.

Architecture is Georgian or later New England Colonial. A simple design motive of stars and fluted columns runs throughout both the interior and exterior of the structure. Clean lines and simplicity, however, characterize the building.

The 16 classrooms are standardized as to size and general appearance. All are provided with wardrobes, ventilating grilles and a library corner on the corridor side. In this way the entrance to each room from the corridor is recessed and there are no doors swinging out to interfere with school traffic.

An activity room is provided between every two classrooms so that much of the art and manual arts program of a modern elementary school can be conducted under the supervision of the teacher without confusion in the regular classroom.

This school was designed as a complete community center. A rear corridor parallel to the main corridor is so arranged that the classrooms can be closed when the auditorium and playroom are used. A separate front entrance opens into this corridor in what appears to be the kindergarten wing; toilets for adult use are provided off this corridor.

The library, which is used to some extent by the adult population, is located near an entrance and may be entered directly from this vestibule. This room is in reality a convertible classroom and is the most serviceable room in the school.

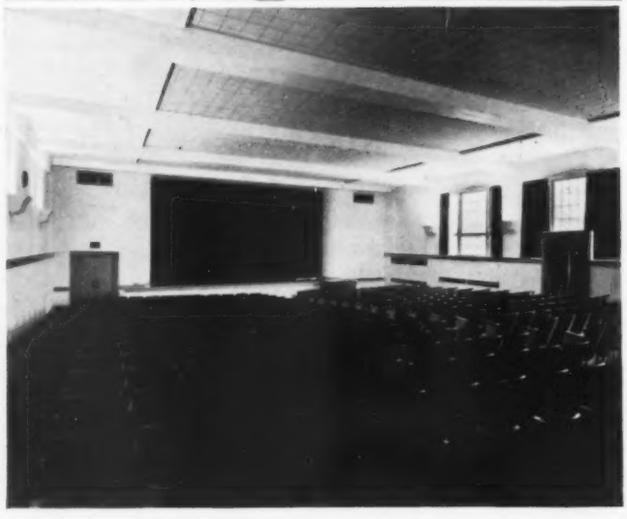
Excellent acoustical properties of the auditorium permit a child's voice to be heard distinctly throughout the entire room. The stage may be entered from a corridor in the rear so that every classroom may be used as a dressing room for special occasions, such as dramatic productions.

The playroom is sufficiently large for a standard basketball court and makes possible full development of a physical education program. Adults have discovered that this room fits into their scheme of social life and it is much in demand.

Two dressing rooms with showers are provided in the basement, with entrance from the corridors and exits leading directly to the play field. These are the only rooms for pupil use below grade and, with the exception of the boiler room and a large room for receiving supplies, the school was built without basements. All toilets are above grade.

A complete kitchen was provided in the rear of the playroom so that banquets could be served by the adult population.

It was not originally intended to provide cafeteria service in this school but, with the coming of surplus commodities and W.P.A. assistance, the kitchen almost immediately was put to use in serving lunches. Through pupil assistance with service carts, hot dishes are served in the classrooms. As all teachers are forced, of necessity, to



Above: A consolidated rural school, Willard serves more than 400 pupils. Right: A separate front entrance in the kindergarten wing provides access to the auditorium and playroom, enabling the school to serve as a complete community center. Lower Right: Simple, but attractive, the auditorium accommodates 450 persons. The stage is entered from the corridor in the rear, permitting classrooms to be used as dressing rooms. Below: Social studies room.

remain at school throughout the entire day, there is abundant supervision of the lunch hour.

Directly across the corridor from the entrance to the playroom is the health room. It also is approached from the main corridor and is easily accessible to the entire school.

The school administration section is off the main vestibule. There is a reception room, with a clerk's counter and files in the rear. The principal's office opens into the clerk's office, the reception room and the main corridor. Directly across the vestibule is the office of the vice principal. This room is equipped with a long table and chairs and is also used as a conference room.

Teachers have a rest room with toilets, a locker room and a kitchenette.

What originally was intended as a stock room on the second floor has become the editorial room of the *Willard Daze*. Here are the machines used in its preparation and here the paper is prepared, typed and composed ready for printing.

Construction Data

WILLIAM J. PROVOOST and RICHARD EVERETT JR., architects, Stamford, Conn.

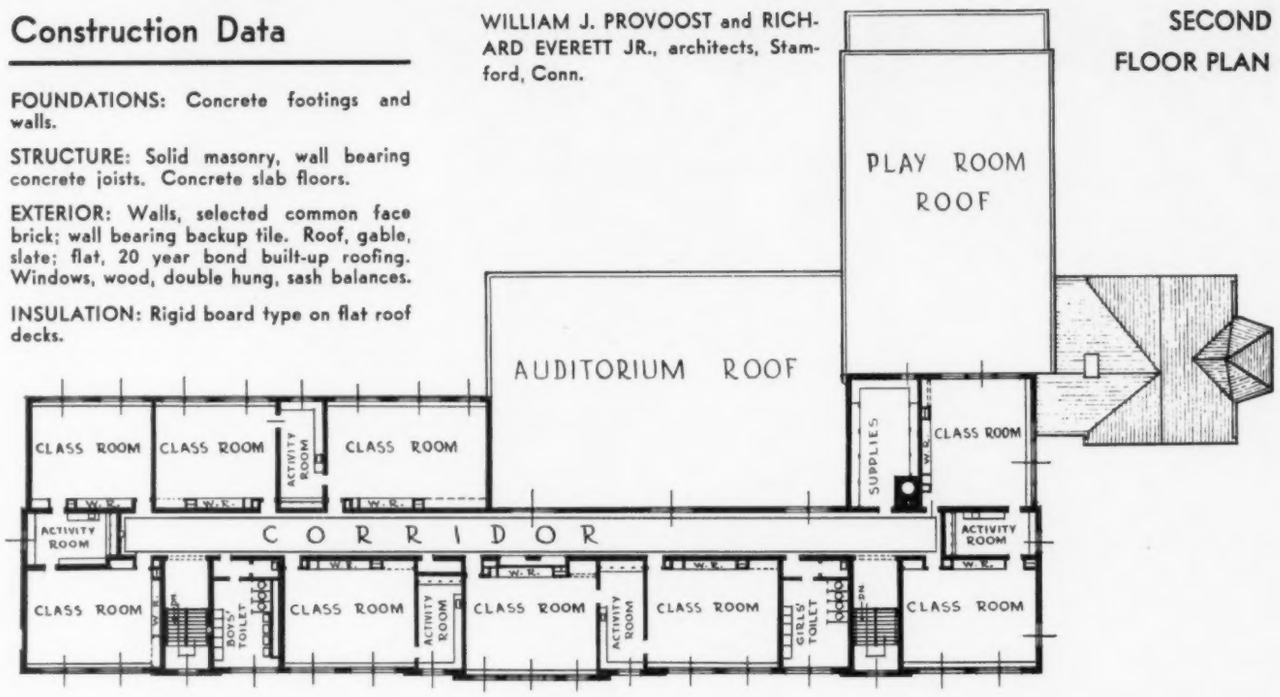
FOUNDATIONS: Concrete footings and walls.

STRUCTURE: Solid masonry, wall bearing concrete joists. Concrete slab floors.

EXTERIOR: Walls, selected common face brick; wall bearing backup tile. Roof, gable, slate; flat, 20 year bond built-up roofing. Windows, wood, double hung, sash balances.

INSULATION: Rigid board type on flat roof decks.

SECOND FLOOR PLAN



WATERPROOFING: Basement floor, integral; walls, preformed. Waterproof membrane built into outer walls of all masonry.

HEATING: Vacuum vapor system. Tubular boilers with power oil burners. Zone system of control with electrically operated valves in boiler room. Thermostatic control.

VENTILATION: Fresh air intake through windows. Draft protection, glass window board. Exhaust ducts throughout building pumped by fans in attic controlled by switchboards in lower corridor. Fans exhaust into cupola and two false chimneys.

PLUMBING: Brass pipe; standard type of fixtures; circulating service hot water system.

ELECTRICITY: Rigid conduit; clock and program system; break glass fire alarm system; sound distribution system.

LIGHTING: Semi-indirect in auditorium.

FLOORS: Playroom, end grain wood block. Kindergarten, linoleum. Remainder of building, asphalt tile laid on concrete, asphalt tile and wood base. Steel safety nosings and treads.

WALLS: Classrooms and corridors, hard white plaster finish; trim, wood. Playroom, cork tile wainscot. Kindergarten, knotty pine, with mural design in oils on canvas.

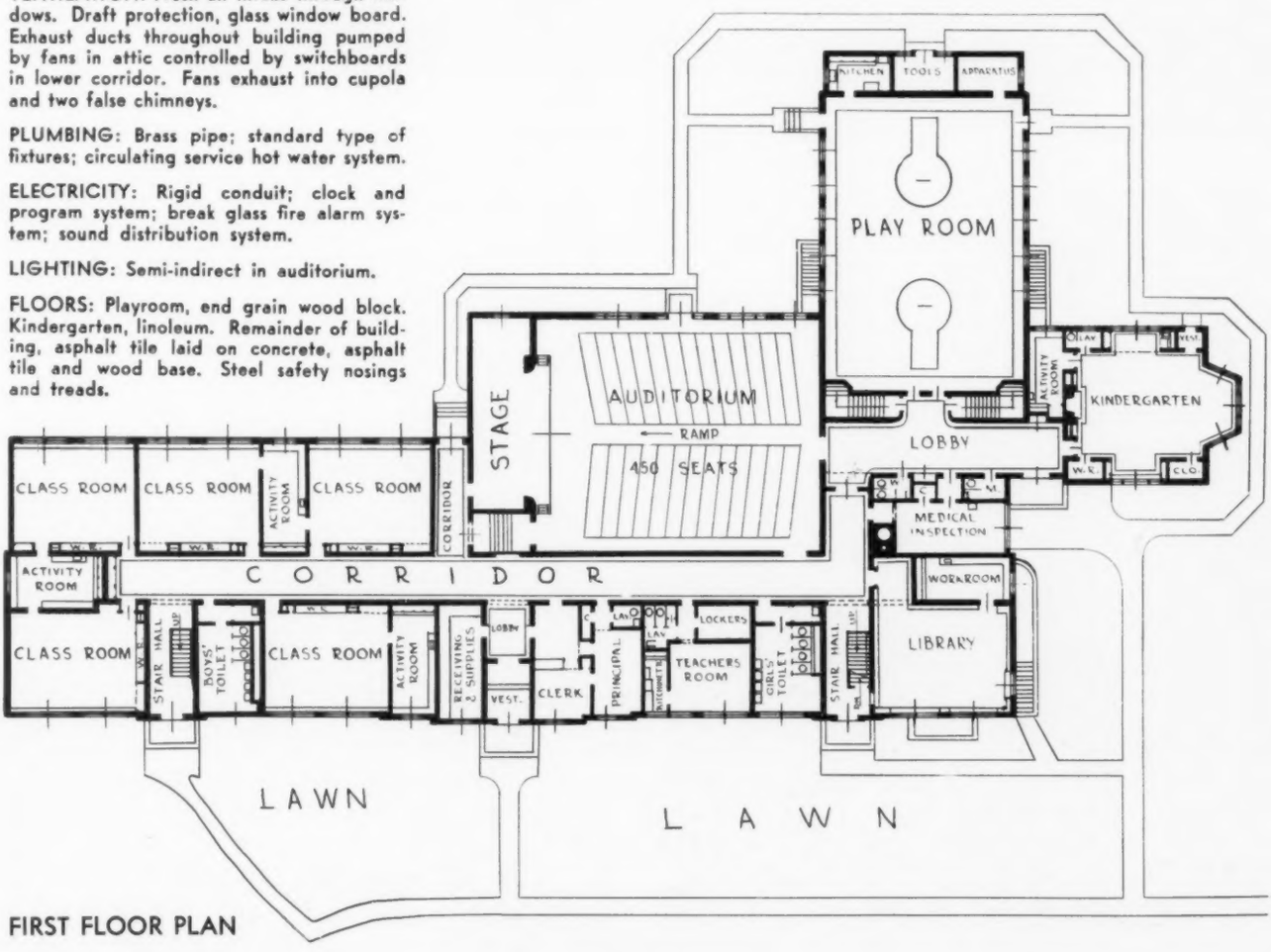
CEILINGS: Acoustically treated.

PAINT: Lead and oil, exterior and interior.

HARDWARE: Solid brass.

GLASS: Double thick "A" quality.

COST: $220,755, or 32 cents per cubic foot.



FIRST FLOOR PLAN

Photograph by C. H. Geerlings

The Old World village, above, a part of the Little Netherlands exhibit of miniatures, and the Dutch Americans dancing in native costume on the streets of their adopted city, Holland, Mich., below.

Tulip Festival Is School Inspired

J. J. RIEMERSMA

High School Principal, Holland, Mich.

IN 1927 Lida Rogers, biology instructor in the high school of a town of 15,000 residents on the shore of Lake Michigan, suggested a city-wide movement to plant one kind of flower along its streets. The town was Holland, Mich. As 90 per cent of the inhabitants are of Dutch descent, the tulip was the natural choice of flower.

The gap between the idea and action was bridged when, in 1928, the common council of the town voted an appropriation to buy 100,000 tulips. The bulbs, imported from the Netherlands, were planted along the city street curbs under the direction of the municipal park superintendent, Jan Van Bragt, who long had advocated mass tulip planting.

Tulip Time was announced to the world in 1929 as the eight day period beginning on the Saturday nearest the fifteenth of May. The public response was overwhelming and local sentiment proved strongly in favor of repeating the event. Among the outstanding members of the original Tulip Time committee was the superintendent of schools, Egbert E. Fell, who had given educational prominence to the town of Holland because of his forward looking and efficient administration.

Under the leadership of a permanent Tulip Time Bureau the festival was developed to include the donning of Dutch costumes, wooden shoes and all, by the citizens. The revival of old Netherlands customs and traditions naturally followed. This angle of the new festival, too, was eagerly accepted by the Hollanders and the color of the tulip blooms was enhanced by the bright hues of the old country dress.

As the bulb planting, program, attendance and recognition increased, Tulip Time developed character. The Dutchmen, with their background of religion and artistry, had no desire to attract those who preferred the carnival type of entertainment. Nor did Holland have the facilities to satisfy the dine and dance element. Tulip Time offered, to an

Photograph by C. H. Geerlin

Above: In 1928 the tulip was planted along the city street curbs of Holland as a city-wide project. As the tulip blooms remain at their best for at least ten days, the eight day period beginning on the Saturday nearest the fifteenth of May is set for the Tulip Time festival. Right: The opening ceremony is held on Saturday afternoon, at which time a mile of brick pavement is scrubbed by a thousand burghers. Then 300 girl dancers from the high school physical education classes march onto the still moist pavement in wooden shoes and the rhythm changes to that of old folk melodies.

unparalled degree, the elements necessary to attract family groups.

Because of the educational nature of the festival, schools cooperated in supplying leadership of control groups arranging the extensive program of pageantry, parades and folk dances. Service clubs and other civic bodies also assist by carrying out assignments from the general committee or originating their own projects for participation.

All participation and direction of programmed events are volunteer efforts. Thus, expense is kept to a minimum. Moreover, as commercial interests are not solicited for funds, they are not in a position to dictate policies.

Visitors to Tulip Time now number more than a half million each year. To help accommodate the 15,000 who are overnight guests, three steamships are docked at the outskirts of the town to provide additional facilities. All-expense tours are organized from near-by metropolitan centers, such as Milwaukee, Chicago, Cleveland, Toledo and Detroit, as well as many others. Garden clubs, school groups and photographers' societies provide much of the patronage.

The opening ceremony of Tulip Time is held on Saturday afternoon, at which time a mile of brick pavement is scrubbed by a thousand *burghers* in the quaint costumes of Volendam, Marken and Zeeland. This ritual of brooms and buckets is opened by an appeal for volunteer scrubbers issued by the *burgemeester,* following a street inspection tour by the city officials. The latter wear the full regalia of seventeenth century magistrates, as if they had just stepped from a Rembrandt canvas.

The event that follows the street scrubbing has been described as "the rhythm of 600 wooden shoes." Three hundred girl dancers from the high school physical education classes march onto the still moist pavement. As the march changes its rhythm to that of old folk melodies, the klomp-klomp of the wooden shoes is accelerated to a clickety-clack as *klompen,* swaying bodies and smiling faces express the spirit of Tulip Time in America.

This wooden shoe street dance is the creation of Mabel Apel, physical education director for girls in the Holland public schools. The dance is not a reproduction of an old world activity of the Hollanders, as they were never known to dance in the clumsy appearing *klompen.* It is rather an expression of the Holland Americans as they rejoice in the freedom they have found in this American land of their adoption.

Photograph by Beernink

As the tulip blooms remain at their best for at least ten days, one of the original problems of the festival committee was to provide a program for the second Saturday. The director and supervisor of instrumental music in the Holland school system, Eugene F. Heeter, was called in. He suggested a review of high school bands to be held in Riverview Athletic Park.

As the entire festival is on a non-commercial basis, one of Mr. Heeter's problems was to produce a program that would be self-financing. High school bands were invited to participate with a share of gate receipts offered them to cover expenses. The percentage is based on the number of miles traveled and the size of the band.

The Saturday afternoon band review has proved highly successful. For three hours some twenty high school bands, resplendent in spotless uniforms and with polished instruments, "do their stuff," leaving the field at 4 p.m. The 1500 young bandsmen then assemble in parade formation and another 1500 of the townspeople, colorfully costumed in their Dutch garb, intersperse the bands. The procession of flying colors, beating drums, klomping dancers, dog carts and the rumbling farm wagons of the Dutch *boer* form a climactic effect entirely fitting for one of the most colorful of festival parades in this country.

An additional musical event has been arranged by Mr. Heeter for Friday night. Under the glare of floodlights and spotlights on the field, famous university bands are headliners.

The outstanding mid-week attraction of Tulip Time is the school

day parade held on Wednesday. In 1940 there were 1200 children, in full costume and wooden shoes, participating. They were dressed to represent milk maids with buckets hung from shoulder yokes, milk men with their dog carts, cheese carriers, fishermen and pottery makers. The various public and non-public schools present floats depicting the activities of the old world Dutch. The school parade is in charge of the teaching corps under the direction of Carolyn Hawes, elementary grade supervisor.

The Netherlands Museum, designated as the official depository for her World's Fair exhibits by Queen Wilhelmina, has made an exhaustive study of the costumes of the Dutch for centuries back and has been successful in maintaining the authenticity of the costumes worn by townspeople at Tulip Time. Lavina Cappon, head of the home economics department of the Holland schools, is a recognized authority on Dutch costuming. She is in charge of costuming the wooden shoe street dancers.

Photographs by C. H. Geerlings

The school children who pour into the city during Tulip Time love the Little Netherlands exhibit of miniatures, the windmill on the page opposite and the little Dutch church above. At left is a Holland American princess transplanted into the center of a big Michigan tulip bed at Holland.

When drama was incorporated in the festival program a few years ago, in the form of pageantry depicting the history of the tulip, the school personnel was again drawn upon heavily. Units were rehearsed by teachers who chose their characters from among their pupils. Mrs. Lucille Donivan, high school speech instructor, was dramatic director and Edward Donivan, head of the manual arts department, took charge of the staging. Dance numbers were placed under the already crowded wing of Miss Apel. The list of assistants to these leaders reads like a section of the teachers' roster.

Much of the attendance at Tulip Time is due to the publicity made available by a large supply of excellent photographs. Most of these are provided by the high school physics instructor, Clyde H. Geerlings. His camera club is perhaps the busiest group in this harried town during festival days. Pictures are requested by almost a hundred periodicals each year so photographs must be high grade, numerous and varied in subject. Subject matter is plentiful and many nationally known photographers are drawn by the event. Students have the privilege of meeting them and watching them work.

School groups charter buses and come to Tulip Time from all over the Middle West. As children are admitted without charge, the Little Netherlands exhibit of miniatures proves one of the most popular attractions for them. So authentic and convincing is this display of art and artisanship that its effect is often mentioned as being equal to that of a travel book describing the quaint spots and customs of old Holland.

Chalk Dust

April Agenda

[The author of April Agenda will appreciate receiving opinions in regard to important administrative problems that are seasonable in nature along with notation as to the month or year they should be given attention. Thus, it is hoped to compile a calendar which may be pasted in the pedogogical hat to be used instead of the string tied around the pedagogical finger.]

THINGS I MUST DO THIS MONTH: Bring the supply and inventory equipment up to date from five years past. Start work on the annual report. Prepare for the gladsome commencement season. Renew personal note at the bank. Get busy collecting new and untried teachers. Take a Sunday off and make the acquaintance of the family. Inspect school grounds for woodchuck holes and possible nickels lost during the winter. Send board president a birthday card. Change winter oil in jalopy. Supervise teachers more thoroughly.

THINGS I WANT TO DO THIS MONTH: Go fishing. Read a book not recommended by the school librarian or in line of duty. Buy a new and extremely vociferous tie. Take a 15 mile jaunt to get away from it all. Slap down the mater of Johnnie Twiddle, the pater of Johnnie Twiddle and the whole Johnnie Twiddle family. Supervise teachers more thoroughly. Say "darn" in a loud voice in a public place.

THINGS I PROBABLY WILL DO THIS MONTH: Interview 20 daughters, sisters, grandmothers and miscellany who want jobs. Enroll in all charity drives and overdraw my budget. Renew personal loan at bank if sales talk is sufficiently impressive. Take some sulphur from the board of education and add molasses. Bawl out the janitor who said "darn" in a loud voice in a public place.

THINGS I WON'T DO THIS MONTH: Go fishing. Supervise teachers more thoroughly. Say "darn" in a loud voice in a public place.

• •

AN ABSENT-MINDED professor, starting for his classes in educational methods one morning, happened to get too close to the curb and got one foot in the gutter. A friend, meeting him, said: "Good morning, professor. How are you feeling this bright spring morning?" "Well," answered our A.M.P., dubiously, "I felt physically fit when I left the house a few minutes ago but during my walk I seem to have developed a most decided limp." MORAL: Keep your head in the clouds and your feet on solid ground.

• •

The School by the Side of the Road

Let me teach and learn with simplicity
A doctrine tremendous and vast
The rule of three—and democracy
And the heritage born of the past;
Though scholars of note may dwell remote
Apart from the din and the strife
'Twere better to be with humanity
Teaching and learning from life.

Let me teach in a school where each lass and lad
Meets life with an eager eye,
The kids that are good, the kids that are bad,
Smart and dumb—for so am I.
There are savants of fame who win their acclaim
Away from the rush and the noise,
But I would teach with a humbler aim,
As a friend of girls and boys.

• •

WE DENY emphatically and categorically that the public schools are authoritarian. Yet ponder the case of the young principal who has just returned from summer school after having been exposed to eight weeks of how to do it efficiently. In the morning hours he starts out with vigor and proceeds to t.c. the little teacher who is in difficulties with the third grade. Having extended sweetness and light according to Barr and Burton, our hero proceeds to the boiler room to "moehlman" the janitorial force. Leaving the custodians in a whirl of gratitude, amazement and consternation, he rushes up stairs for a snappy meeting to "dewey" up the staff. Exhausted, he reaches home in time to "morrisplan" his budget for the hungry days ahead. There may be some benighted administrators who are not yet acquainted with the new educational verbiage which has been introduced into all the better dictionaries. There are none, however, who will fail to understand the budgetary reference.

Edward Bausch . . . . . Microscope Maker

WHILE Pasteur and his contemporaries were fighting the combined forces of superstition and disease to lay the foundations for modern bacteriology, another young man was designing a microscope that would help immeasurably in spreading the benefits of science to all mankind.

While Pasteur was proving that heating would destroy the organisms that were making French wines turn bitter, and perfecting the pasteurizing process that makes his name immortal, in America, Edward Bausch was computing his own objectives, grinding his lenses and fitting the parts for the first Bausch & Lomb Microscope.

While Pasteur was proving his procedure for the cure of rabies by saving the life of the little Alsatian peasant, Joseph Meister, Edward Bausch was working day and night to demonstrate his belief that quality microscopes could be made in quantities and at such prices as to bring them within the reach of all students and research workers.

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Mental Hygiene Is First Need

In the Selection of Teachers

FREDERICK L. PATRY, M.D.
Psychiatrist, Albany, N. Y.

THE need for mental hygiene in the preparation of school teachers was brought to a focus by the survey made by the Massachusetts Society for Mental Hygiene between 1932 and 1934. The upshot of this report,[1] as well as the fact-finding investigations of others, leaves no doubt that there is a telling need; however, professional educators and the general public are not fully aware of it. The following facts should arouse more interest in this need to the end that effective action may continue to result in wholesome growth:

1. Economic Facts: This nation's sickness bill is about twelve billion dollars. The crime bill is approximately fifteen billion dollars. Have not the state and community a right to ask schools (and their fountainhead, the teacher education institutions) to do what they can to reduce this largely preventable burden? The dictum, "First health, then wisdom," opens the door for sound cogitation and evaluations. Sick children (or sick teachers) are not in a condition to profit by the educational menu. Moreover, it is more costly to educate children who are in poor mental health than to educate children who are mentally and emotionally well.

Mental Ill Health Is Costly

It is estimated that 10 out of 40 children in the average classroom are handicapped by mental ill health to an extent that it seriously interferes with their success in school and with later adjustments to work and society. Two out of the 10 will probably become patients in mental hospitals unless preventive measures are applied early in life. (This is about the same percentage that will go to college!) From the standpoint of reduction of community and state cost, it is obvious that more time should be spent in shaping and directing the life reaction patterns of children. Let us assist in building human personalities that will successfully embrace life in this day and age.

[1]Ryan, W. Carson: Mental Health Through Education. New York: The Commonwealth Fund, 1938. Pp. 76-85. $1.50.

2. Child Facts: Education is still largely a process of mass production. Only 10 per cent of these handicapped children are receiving individual and specialized attention. Early signs and symptoms of unwholesome reactions in normal children and of faulty personality developments, which may be forerunners of mental disability, can be recognized in schools and managed in positive ways.

Developing Teacher Personality

The student teacher is the first line of defense in any organized mental hygiene program. The whole teacher education program, if measured in terms of community service, must square itself with the question: "What is its batting score in furthering American democracy through the building of wholesome, well-integrated personalities?" The content of the curriculum of teacher education must be revised and extended to give first place to the optimal development of human interrelationships.

3. Student Teacher Facts: The fountainhead of supply of future teacher material is the most important consideration. Student teacher selection is, obviously, the first need. Since the teacher is more or less responsible for the personality and behavior reactions of hundreds of other susceptible and impressionable individuals, the teacher's example is of paramount importance. Certainly, more time and value must be given to selection on the basis of a stabilized personality than upon examination ratings.

I would suggest "mental health certification" of each student teacher applicant as the chief criterion for selection. This should be a formulation (not a number, percentage or grade rating) of the minimum essential facts for evaluating the student teacher's mental health, the individual's evalution in terms of significant facts of performance in the light of her life history, present effectiveness in socialized living and probable future success in teaching as a career. Certification should cover the following pertinent facts:

Does the student teacher's reaction respond to her present needs?

Are her powers of adaptation in keeping with the various situations in which she lives?

Does her behavior represent adequate responses to environmental stimuli?

Are her functional performances equal to the opportunities afforded and to the demands made upon her in the business of living?

These criteria must correspond to the facts of her life record. Importance should be given to effective and harmonious human interrelationships. This is in keeping with the concept that each school is a medium of social learning in which children may discover themselves and others and acquire facility in living happily and effectively.

Teachers Suffer Mental Ills

Besides the obligation of preserving and enriching pupil mental health, the curriculum content should emphasize teacher mental hygiene as a prime necessity for herself. There is some evidence that teachers are more prone than the average person to suffer varying degrees of nervous and mental disabilities.

4. Mental Hygiene Content of Curriculum: In the light of the foregoing discussion of significant facts pointing to the need for more and better organized mental hygiene projects, activities and experiences for student teachers, may I single out the following six topics for special attention:

Personality study of each student teacher in order to recognize and correct deficiencies and to capitalize constructive potentialities.

The foregoing technic modified for pupils.

(*Continued on page* 62)

Note interesting cove-base treatment in this corridor of the Hackensack Hospital, Hackensack, N. J. It makes cleaning easier, assures complete sanitation. This particular installation is 17 years old, and still going strong . . . proof of the permanency of Nairn Linoleum Floors.

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Unity in the Health Program

ELMON L. VERNIER

Director of Health and Physical Education
Board of Education, New Rochelle, N. Y.

THE establishment of sound cooperative relationships between the school health service and community health and welfare agencies is an important function of school health administration. The responsibility of the schools for the health and welfare of children must be shared with the home and community agencies if maximum results are to be realized.

School health service is an educational function, the aim of which is to protect and to promote the health of school children. The scope of this service today is much broader than that of the earlier medical inspection service which was developed in response to a demand for the control of communicable diseases in the schools.

Why a School Health Service?

The functions of school health service and supervision as indicated by the division of health and physical education, New York State Education Department, are significant of the modern trend. They are:

1. To maintain a healthful school environment and conditions which are conducive toward the achievement of all educational objectives. This function deals with the sanitation of the school plant and the supervision of processes that affect the health of pupils and school personnel.

2. To promote healthful conditions of pupils and teachers so that education can proceed effectively. This function includes the examinations to determine the health status of the individual and the follow-up to obtain needed corrections and educational adjustments.

3. To provide situations in which the child develops habits of healthful living. This function involves the arrangement of situations through health service and supervision so that the pupils' experiences will produce desirable results, such as (a) responsibility for the intelligent care of his health; (b) an appreciation of the value of qualified health service to the individual, the group and the community; (c) the value of the use of public health procedures, such as vaccination in the protection of life and health, and (d) knowledge regarding the wise selection and use of professional health services.

In school systems in which these functions are carried out it is important that the administrator in charge of health education familiarize himself thoroughly with the various community health and welfare agencies. In New Rochelle, N. Y., a city of 60,000 inhabitants and a suburb of New York City, the school health service personnel finds it necessary to make frequent contacts with the following community agencies: department of public health, department of public welfare, New Rochelle Hospital, Westchester Tuberculosis and Public Health Association, Medical Society of New Rochelle, Medical Society of Westchester County, local and state dental societies, Visiting Nurse Association of New Rochelle, orthopedic division of the state department of health, Grasslands Hospital, Westchester County Children's Association and the department of family and child welfare of Westchester County.

Whether or not these agencies are official, nonofficial, private or voluntary, the enlistment of their aid is of vital importance when the health of children is being considered.

Central Agency Needed

Unless there is some centralizing force in the community, such as a council of social agencies or a similar organization, it is probable that each of the health or welfare agencies will function as a separate unit with a minimal relationship to the others. This usually brings about duplication of efforts and frequently results in certain feelings that interfere with the development of a comprehensive program of community health education.

A typical case illustrates how duplication of efforts and general misunderstanding result when there is a lack of cooperation on the part of the various organizations. A nurse-teacher made a visit to a home for two reasons: (1) the pupil had been absent because of ringworm; (2) she wished to investigate the home conditions, which had been reported as unsatisfactory. She fulfilled her duty by giving proper instruction to the parents relative to correction of general health conditions and reported the case to the departments of public health and public welfare.

Confusion Retarded Results

Through the schools, other health and welfare agencies learned about the particular situation. Nine agencies soon became involved and little was being accomplished in the way of actual improvement of conditions. It was true that the various community agencies were responding to the call but it was clearly evident that sound results were long in being realized because of a lack of cooperative relationships among the agencies. If a central office had existed in the community through which the case could have been cleared, it is probable that results which were achieved during a period of four months could have been attained in a few days.

Even with a well-balanced council of social agencies, it is impossible for this organization alone to bring about cooperative relationships among the various agencies. Rather, it is the responsibility of the agencies themselves to take the initiative and to utilize the council as a centralizing force.

School health programs are the responsibility of the educational authorities. School health service is an educational function; therefore, it is a part of the general education program. However, it is highly important that the school administrator in charge of health education establish cooperative relationships with the local public health department. This department is responsible for such city-wide functions as communicable disease control, food and milk control, infant and preschool hygiene and general sanitation, including water supply and excreta disposal.

HATS OFF TO the men and women who have made school life enjoyable! Today, it's "off to school with a smile." Improved teaching methods, better facilities, more attractive surroundings — all play their part in the school's growing popularity.

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If you are interested in improving this "first line of health defense" in your schools, write for complete data now — today. Then ask your heating contractor for a bid on American Blower equipment.

American Blower complete Heating and Ventilating Systems (above), are available to meet all school needs. Hundreds are now in use in U. S. and Canadian schools.

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School health officials should be vitally concerned with these and other public health measures as they affect the school child.

Children of school age are especially susceptible to many of the communicable diseases. In developing a clear interpretation of the proper procedures to follow, it is imperative that the schools develop jointly with the public health department policies and regulations regarding the control of communicable disease in the schools. Also of vital importance to good administration is the development of, and adherence to, other policies, such as those relating to clinics, preschool examinations and general followup procedure.

Public and school health officials in New Rochelle have formulated certain policies and regulations governing communicable disease control in the schools as well as other policies and procedures that are pertinent to school health administration.

Details Are Time Consuming

Children whose parents are on city relief rolls receive necessary medical service through the department of public welfare. The schools should work with this community agency in formulating policies of procedure regarding cases that fall in this category. Many details often necessary in a welfare department frequently cause the absence of a pupil from school for as much as two half days while waiting to complete a single clinic appointment which, in itself, may not consume more than ten minutes.

To bring about a better working relationship between the schools and the department of public welfare at New Rochelle, procedures have been established relative to assignment of cases to the various clinics and reports on these cases after their clinic visitations. The department of public welfare has submitted its clinic schedule to the schools and has agreed to submit information whenever changes are made.

The New Rochelle Hospital is the center of several types of clinics to which many school children are referred by the school health service. Again, it is necessary that the two organizations agree on definite policies for referring, admitting and reporting cases. Adherence to such policies is essential in budgeting the time of both pupils and clinic officials.

The Westchester Tuberculosis and Public Health Association has been instrumental in initiating the annual tuberculin testing program in the New Rochelle public schools. Through cooperation with this organization the schools are the recipients of valuable health teaching materials, including motion picture films and other visual aids.

Medical Society Advises

Our school physicians are members of the city and county medical societies. Through their memberships a definite connection is established with these organizations. At the request of school health officials the New Rochelle Medical Society appoints from its membership a committee that serves as an advisory board on school health problems.

Members of the Ninth District Dental Society of the State of New York and other local dentists have cooperated with our school dental service by recording findings on the pupil dental certificate, which is required of each pupil annually.

At the present time the New Rochelle Council of Social Agencies is organizing a city-wide nursing council. This body will improve the professional relationships of the nurses in all community health agencies.

Other health and welfare agencies have particular relationships with the school health service although to a less degree than those described. However, it is essential that there be clear understanding between each of these agencies and the school health service.

A survey of public health activities in New Rochelle was made in 1938 by Dr. Ira V. Hiscock, professor of public health, Yale University School of Medicine. In his survey Doctor Hiscock found a lack of coordination among the various services designed for the common purpose of disease prevention and health conservation. He recommended that the Council of Social Agencies "organize a health division made up of executive and board member representatives of the various health, medical and dental associations serving the community, including members at large."

The committee was promptly organized according to the survey recommendations. One important objective of the committee is "to serve as a forum for the discussion of problems of mutual interest and for the continuance of joint program planning."

Administrators and others connected with the various community health and welfare agencies should become acquainted professionally. The Council of Social Agencies provides through its periodic luncheon and committee meetings excellent opportunities for these people to meet and discuss their professional problems. This is only a beginning, however, in the establishment of sound interrelationships as they pertain to the detailed functions of the various organizations. From this point it is the responsibility of the agencies themselves to carry on in the development of policies and procedures.

It has been indicated herein that, in order to attain the maximum results in their health education program, the schools must work with the home and the community agencies. Because the school population consists of children from all parts of the community, school health education administrators should take the initiative in establishing and maintaining sound cooperative relationships with all community health and welfare agencies.

Mental Hygiene Needed

(*Continued from page* 58)

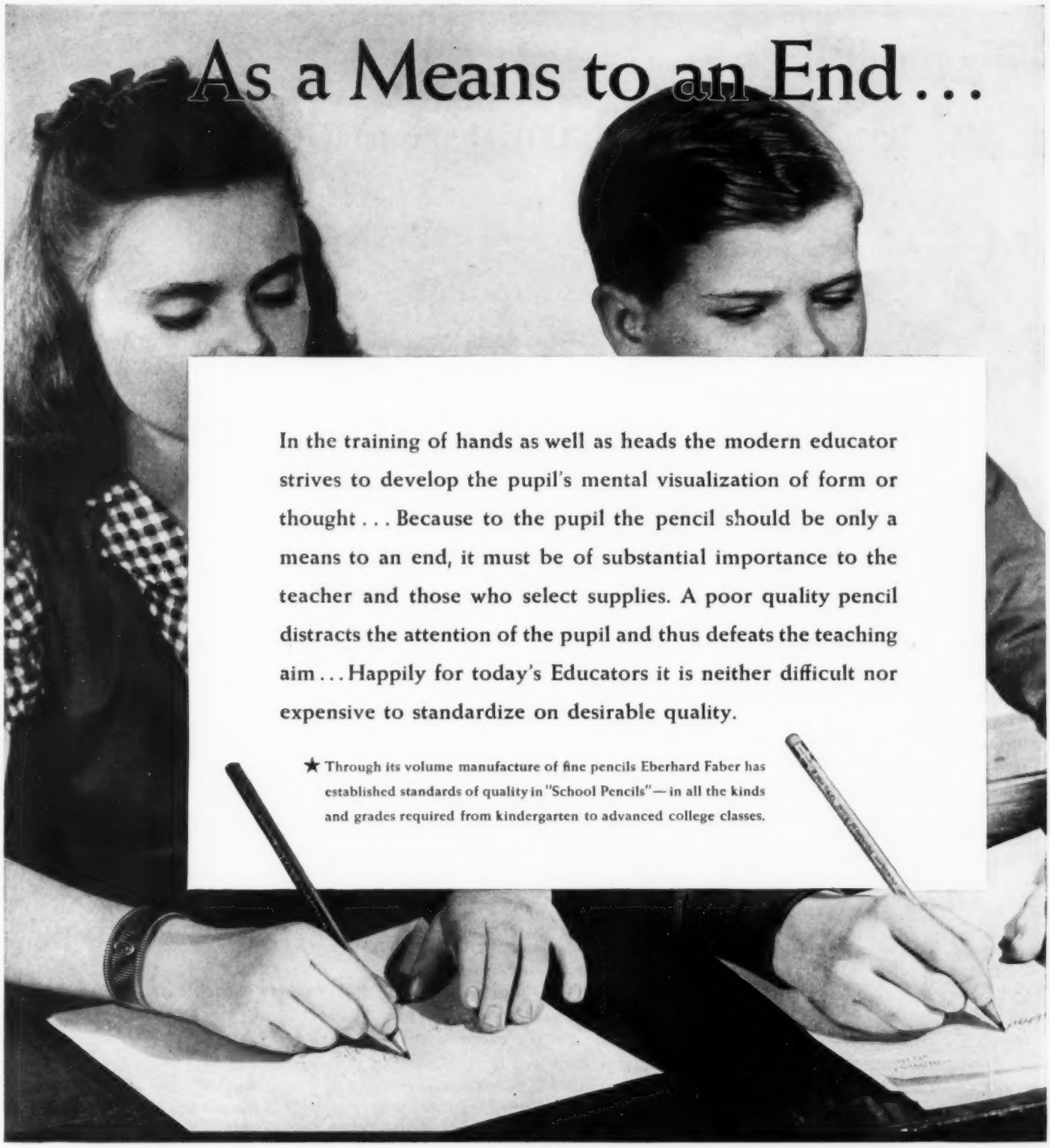
Case study methods.

Elements of social case work with minimum field experience under a qualified visiting teacher.

Knowledge of available child guidance clinics, their operation and cooperation technic with schools. This should bring home the need of psychological, visiting teacher and psychiatric services for every school.

Discovery and elimination of false notions about mental illness and ignorance concerning pupil-teacher relationships. The inculcation of sound mental hygiene attitudes, habits and practices is our main desideratum.

There is a vast discrepancy between what we now know about mental hygiene and the extent of its application. Revised and extended content of the curriculum for student teachers can do much to remove the unnecessary lag and hiatus.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Teachers!

Pick Your Principal and Train Him

FREDERICK J. MOFFITT

Director of Public Relations
New York State Teachers Association

MANY profound words have been written to teach the school principal how to select faculty personnel. Speeches, panels and seminars have been given over to a review of the qualifications that should be demanded of the classroom teacher. Research workers have gathered exhaustive data for hiring teachers, while great educational conventions have given valuable program space to the art of teacher selection. But with all the advice on how the principal may select a teacher, practically nothing has been written that would give assistance to the teacher in selecting a principal.

It is a disquieting thought that this fundamental educational technic has been left largely to chance, for a lack of understanding of this important matter on the part of the teacher may lead to serious educational maladjustment. While it is important to the community that the principal be a good picker of teachers, it is just as important to the teacher that she obtain a reasonably good executive.

New Criteria Are Impressive

Picking a principal demands skill and acumen and an understanding of human nature. In the absence of research on the subject, it might be well for each teacher to set up some criteria for achieving a scientific piece of work in educational evaluation. Setting up a few more criteria in the exploration of education does no harm and often reassures the general public that there is serious thinking going on in behalf of the children and that education has taken to itself a semblance of scientific procedure.

What should the classroom teacher expect from the principal or superintendent to whom she applies for a position? A word of warning should be given to the beginning teacher. She must not expect too much, at least in her first five positions. No school executive is absolutely perfect; all of them have faults and idiosyncrasies. Whenever a principal reaches perfection, he usually accepts a position as a college dean, where he sinks quietly into oblivion, or else he goes into politics and is transferred to Washington to spend his time in rearranging the alphabet.

All teachers must face the fact, then, that their executive officer will have some faults that cannot be helped, although she may strive valiantly to correct them as soon as she is safely in the haven of tenure.

External Impressions Unimportant

In selecting a principal the teacher should not give too much importance to the item of physical beauty. Years of wear and tear as a school executive are not conducive to the cultivation of beauty and the young teacher must not be disappointed if friends and relatives make disparaging remarks about his personal appearance. A few gray hairs or a tendency toward plumpness on the part of the executive should not deter a teacher from an affirmative selection. If the teacher remembers her Shakespeare, she will realize that a plump principal is likely to be a lenient supervisor, especially if her classroom is on the third floor back.

Nor despite the volumes written on educational administration should the teacher place too much stress upon the school executive's seeming lack of manners. He is likely to be abrupt, preoccupied, deeply interested in his own conversation or brusque. If this is the case, give a thought to the executive wife. If she dresses well and is mentally alert and gracious, the teacher may be assured that her new boss is not really the boor he seems and that probably he has the heart of a gentleman even though he does not wear it on his sleeve.

Leaving the external impressions, what should the teacher expect in positive virtues from her superior officer? First of all, she may well look for signs of leadership.

The school executive, by law and custom, is the leader of the school and there are situations in which he must assert leadership in no uncertain fashion. In difficult decisions, such as determining the merits of the latest methods in addition or informing the mother of little Cuthbert just why it all happened, there must be a firmness of decision amounting to near dictatorship. Progressives may sniff at this interpretation but it is founded on fact and not on theory.

Nothing is more pathetic than to visit a school in which each teacher has been left to her own devices and in which each one has ridden her hobbyhorse in a number of different directions at the same time. The faculty of a well-managed school is like the school orchestra. Each member plays a part which, under proper direction, may swell into a symphony. The orchestra leader appears to be an unnecessary factor but, nevertheless, without leadership, the orchestra would be in a state of utter confusion.

Sound Scholarship Is Essential

However, mere leadership on the part of the school executive is not enough. He should possess a sense of sound scholarship. It is not necessarily the scholarship that comes from quoting German sentences to the teacher of French and French verbs to the German teacher. His is the scholarship which recognizes that all child psychology is not to be learned in one summer session at Columbia and that there may be laws of behavior that have not yet been discovered.

With sound scholarship, there must be a tolerance and sympathetic understanding of the problems that beset the teacher. Lacking tolerance,

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life with a principal will be a series of explosions that wreck many a promising career. Every principal, too, should possess a sense of relative values. He may have earned a shining mark in his examination in the theory of supervision, yet he must know that there are many times during the practice of that esoteric subject when it is well to slip quietly out of the way and to leave a teacher to her own devices.

A good principal realizes that it is just as important and socially useful that a teacher instruct little Herbert in the manual manipulations dealing with the intricacies of his intimate attire as it is to be on the dot at the weekly teachers' meeting. His sense of relativity must be so developed that he can find money in the budget for the latest materials in kindergarten practice as easily as he can find cash for the leather covered graduation diplomas whereon he can engrave his name.

The principal should have a keen sense of humor. The practice of education has been made too humorless. Society has insisted that education be a gloomy process and educators have accepted this viewpoint. When a schoolmaster takes up his solemn round at 9 a.m., even though he dons his most professional smile and his faculty members put on their bright morning faces, a cloud of gloom sweeps over the rising sun.

For her own protection the teacher should select a principal who has a twinkle in his eye when the world is not expecting him to wear his best professorial manner. She may select an executive who is careless or thoughtless or unappreciative of the importance of her work but never one who values too highly the dignity of his position.

Finally, when the principal has asked all the questions that principals seem to know by rote, the teacher being interviewed should ask a question of her own. When he has queried the teacher on such vital matters as her weight, her age, her height, her ability to discipline, whether or not she sings in the choir and how long she has known the current boy friend, she should ask him one question before she signs the contract.

What, Mr. Principal, is your educational philosophy?

On the answer to that question will depend in large measure, the professional happiness, growth and future of the teacher. The executive officer of the school may be gifted with leadership, tolerance, scholarship and understanding but if he does not know where he is going in the educational scheme of things it is better that he turn his talents to selling life insurance.

What if the teacher finds it too difficult to discover this ideal principal? Is it not a hopeless quest to discover a school executive who has all these noble attributes?

The teacher may have to lower the ideals with which she comes equipped fresh from teachers' college but there is no reason for complete despair. Much may be done with a little careful guidance. Educational guidance is said to be the slogan that will lead to the more abundant life. It may be tried out on the principal with high hopes.

Under the firm, considerate guidance of the experienced classroom teacher, many principals have developed into excellent executives. In fact, that is how they all get that way although they may not be the first to admit it.

Are Your Custodians Fairly Paid?

HARRY K. YOUNG

Assistant Vice Principal
Polytechnic High School, Riverside, Calif.

PAY for cheap merchandise and you get cheap merchandise! Pay for cheap help and you get cheap help! These are trite sayings but they are true, nevertheless.

Do you know whether or not you are paying for cheap custodial help? Do you know what industry is paying for labor comparable to that represented by school custodians? Do you know that the U. S. Department of Labor makes studies of the wage rates of the various major industries in the different states of the United States?

Last year in California it was found that the beginning wage for common laborers in 281 of the larger industrial concerns of the state averaged $0.573 an hour. If personnel administrators in California school systems expect to get workers equal to those entering industry as common laborers they must pay a wage equal to or better than $0.573 an hour. In fact, the assumption is that school systems will have to pay a slightly higher wage.

Industrial employes receive added benefits in the way of unemployment insurance and Federal Social Security, two types of benefits not ordinarily received by school employes. It must be borne in mind, too, that advancement into the higher wage brackets is slow and limited in school custodial work, a situation that does not enhance this type of work.

It might be argued that school systems now paying a wage equal to or less than that paid by industry cannot pay a higher wage and keep the same number of men on the force. There is, of course, always the question of how much money should be spent for maintenance.

Still it must be remembered that to establish the school wage scale on a basis comparable to or less than that of industry will, in the long run, attract only common laborers.

A wage scale based upon industrial rates may be too low from another aspect. If it should remain on the common laborer level and not increase as the worker's years of service increase, then it will work to the detriment of the service. The better workers will not stay in the system if the incentive offered by the salary scale is not attractive. Besides placing the beginning wage rate on a level at least equal to that paid by industry, there also must be increments added to the employe's salary during the period he is in the service of the school system.

We, as a nation, are apparently entering an era of rising labor costs. The school system's employes are not a group apart from other laboring bodies. They, too, will need adequate and, perhaps, increased compensation in the near future.

School administrators must reexamine and reappraise noncertificated employe labor costs not only from the standpoint of the just employer but also from the standpoint of good business practice.

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REPORTS of state school legislation are not complete if limited to measures enacted by legislatures and approved by governors. Several states allow statutes to be initiated and made law by popular vote without the agency of the legislature. Some states provide for popular referendums upon measures passed by the legislature. The requirement that the people must pass directly upon proposed constitutional amendments is almost universal.

A big election year was 1940. Candidates for national and state offices monopolized the public eye but direct legislative measures were also on the ballot in considerable numbers. Several important measures affecting public education were adopted by popular vote in various states. They are of three types: (1) constitutional amendments, (2) statutes enacted by popular initiative and (3) proposed laws approved by referendum.

Arizona Takes a Step Forward

A broad step forward in state support of public education was taken by an initiated law in Arizona which requires that the state levy for aid to local schools shall provide $65 a year per pupil for grammar schools and $95 per pupil for high schools, in lieu of the former contribution of $25 per pupil. The popular vote approving this measure was in a ratio of approximately 58 to 41.

This threefold increase in the state levy for schools was advocated by the state teachers' association as a necessary measure toward equalization of educational opportunity in the state. It was pointed out that one district could raise as much money per pupil by a local levy of $1 per $100 of assessed valuation as another district could raise by a levy of $7.80. Proponents of the measure argued that it was not intended to increase the present average expenditure of about $80 a year for elementary pupils and $153 per year for high school pupils but only to effect a more equitable distribution of both the expenditure and the tax burden. They insisted that it would eventually make possible actual reductions of the taxes paid by a great majority of the taxpayers of the state.

Opponents objected that the proposal "lacked elasticity" because it provides for distributing the state contribution to schools, "irrespective of local needs." They also pointed out that the mandatory statute requiring counties to levy at least $25 and not more than $40 per pupil in elementary and high schools continues in force as before and that school districts still have the right to levy special taxes.

Notwithstanding these arguments, the principle of increased support from state sources triumphed. One restriction of the local use of the state contribution provides that not more than 25 per cent of it can be expended for "other than administrative and instructional costs, as defined by the state board of education." This method of protecting the main function of the schools is often found elsewhere and is generally approved.

The people of Arkansas, by a thumping ratio of about 107 to 57, adopted a constitutional amendment authorizing the legal voters of any city having a population of at least 5000 to levy a tax not to exceed one mill on real and personal property for the purpose of maintaining a city public library. Only a simple majority vote is necessary.

Earmarking Is Evidenced

When legislating directly, the people seemed to show an exaggerated preference for earmarking taxes for specific purposes, a practice now declining in favor among experts in public finance and apparently also among legislators. The voters of Montana approved by referendum a state levy not to exceed 3½ mills, to be in effect for a period of ten years, for the benefit of the institutions of higher education composing the Greater University of Montana, together with the agricultural experiment station and its branches and substations, the agricultural extension service, the soil survey and the grain laboratory. The legislature is to decide each year what portions are necessary for each of the separate institutions and services.

In North Dakota an initiated statute allocated all sales tax proceeds, except those expended for administering the tax, to the state equalization fund for education and to the public welfare fund. In the future the division of the proceeds between these two functions is left to be determined by the legislature.

There was an epidemic of constitutional amendments in the western states, allocating the taxes on gasoline and motor vehicles exclusively to highway purposes. In Idaho the amendment thus earmarks all taxes on motor fuels. In Nevada it covers motor vehicle license fees, gasoline taxes and special taxes on vehicles. In North Dakota and South Dakota the earmarking amendments affect taxes on motor vehicles and gasoline.

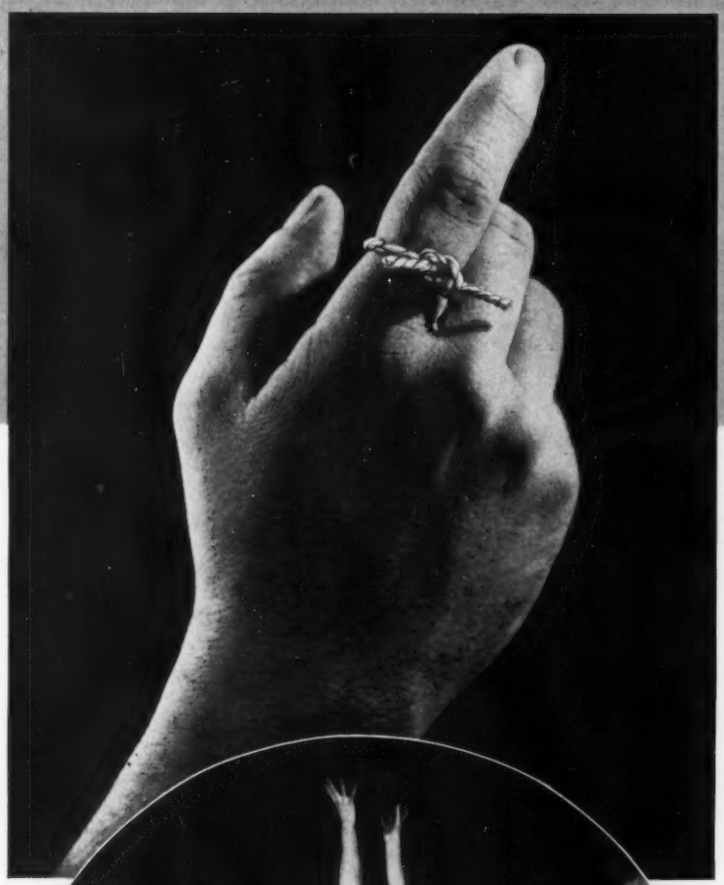
Allocating Is Questionable Tactic

If earmarking of revenues is rightly declining in favor generally, then certainly imbedding the allocations in the state constitutions is a questionable tactic. The exaggerated solicitude for highway support may be partly explained in the western states of vast area and small population, in which the number of miles of highways that must be maintained per capita is much larger than in more populous states.

Idaho amended the constitution to provide that permanent school funds shall be invested only in federal, county, city, village or school district bonds or state warrants. The effect is to prohibit the investment of endowment funds in farm property or farm mortgages, which have proved to be an unreliable risk in recent years. Idaho adopted another amendment permitting the legislature to prescribe any method of disbursement of state funds for undertakings in which fiscal cooperation is received from the federal government. Mississippi adopted an amendment allowing counties to sell their school land located outside their boundaries.

The people of the state of Washington approved by referendum the limitation of the aggregate levy on

Something to Remember



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property for state, county, city or town, school district and road district purposes to 40 mills; the levy for state purposes to be limited to 2 mills, to be used only for the five institutions of higher education.

Any county, school district, city or town may levy beyond the limitation if authorized by a favorable vote of three fifths of those voting at a special election held in the year in which the levy is made and not oftener than once in the year. Such an election is not valid unless the total number voting equals at least 40 per cent of the number who voted for governor at the next preceding gubernatorial election.

The people of Michigan approved by referendum a new measure regulating the practice of dentistry, setting up a reconstituted state board of dentistry and prescribing standards for dental education.

Louisiana provided by constitutional amendment for the reorganization of the governing board of the state university, in an apparent effort to erect some safeguards against the conditions under which the unfortunate administrative situation of recent years developed. The former board of supervisors of the state university consisted of the governor and 14 other members appointed by him with senatorial confirmation for overlapping terms of seven years.

Old members hold until the expiration of their respective terms but new members are to be appointed under a scheme whereby, eventually, all will have terms of fourteen years, with two expiring in June of each even numbered year. The design is to prevent any one governor under ordinary circumstances from making enough appointments to gain control of the board.

Under the former scheme only one member of the board could be a resident of any one parish, except that Orleans and East Baton Rouge could have two members each. At least six were required to be graduates of the university. The new scheme drops any reference to the residence of the appointees but stipulates that seven must be graduates of the state university.

Commenting on the new plan, the New Orleans Bureau of Governmental Research somewhat skeptically remarked in its bulletin that "politicalization" in a board cannot be prevented by these devices alone but conceded that "some stability will be given to the reconstituted board in a difficult period of rebuilding."

In the extensive reorganization of the whole state administrative structure which was also adopted in Louisiana, the state university was constituted an independent establishment not connected with any of the state executive departments. Its governing board was expressly made a corporate body. The state board of education, as provided for in the constitution for many years, was saved and its powers expressly kept unimpaired, though the department of education was enumerated as one of the new principal executive departments of the state government.

Released Time for Religious Study

New York City school children are being released from school early each Wednesday afternoon to receive religious education in churches of their parents' choice. Above is the Rev. Nicholas M. Feringa, vicar, Protestant Episcopal Chapel of the Incarnation, Manhattan, teaching his first class.

RELIGIOUS instruction for New York City public school children, authorized by the state's released time law, began early in February with about 3000 children attending classes in 67 churches and religious centers cooperating with the Greater New York Interfaith Committee. The children are from 8 to 11 years of age.

Most of the classes began a few minutes after 2 p.m., the time when the children were released from their schools, and continued for about an hour. Reports from principals indicated that the proportion of children released for the instruction varied widely, from 10 to 60 per cent. The average, roughly, was somewhere between 25 and 30 per cent. Initial attendance was not so great as had been hoped for by religious groups.

In all the centers emphasis was placed on tolerance toward persons of other faiths. For this purpose in all the Protestant churches and in some of the Jewish centers the teachers read to the children "A Place of Refuge" by Elma E. Levinger, describing an incident of tolerance and friendship between Roger Williams, who founded the colony of Rhode Island in 1636, a Catholic and two Jews.

Religious instruction on school time is made possible by the Coudert-McLaughlin Act, known as the released time law, which permits principals to release public school children one hour a week for outside religious instruction at the request of parents. There are more than 1,000,000 children in 41 states on released time for religious education.

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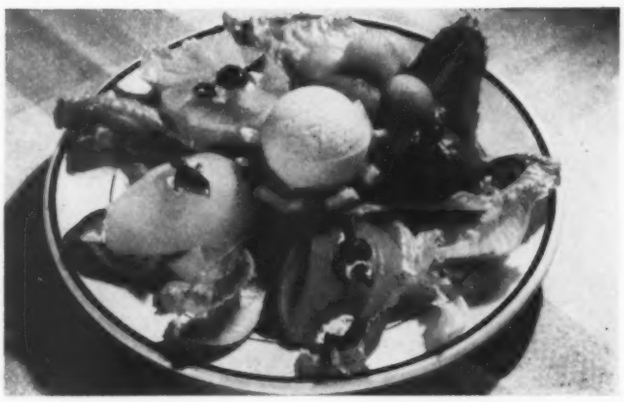
Variety Helps the Menu

KATHLEEN DOUGHERTY

Cafeteria Director, G.A.R. School Cafeteria Wilkes-Barre, Pa.



A fruit salad plate that is designed to tempt the appetite of the diet-minded pupil. It consists of peach, pineapple, pear, plum and melon and is topped with a scoop of lemon ice.

ALL food served in the G.A.R. School cafeteria, Wilkes-Barre, Pa., is of best quality. With the exception of a few 10 cent specials the cost to pupils and teachers is 5 cents a portion. Each day's menu includes fruit juices, grapefruit halves, two soups, a meat and meat substitute, a variety of bread and rolls, four salads, three desserts, milk and hot chocolate.

Putting on a good show is important in cafeteria work. Much time is spent on food arrangement, therefore, so that we may be able to sell the pupil the foods we know he should have.

Individual casseroles, for example, have been helpful in educating the pupil to try new food combinations. All sorts of vegetables are mixed with a cheese or mushroom sauce and baked and served in these individual dishes. Stews and meat pies, which were formerly disliked, thus have become popular. Also, food is kept warmer served this way and the service at the counter is improved. Meat sales have gone up considerably since we started serving spiced fruit with it. A specialty is sausage with spiced apple rings; another is frankfurters, glorified by stuffing with bread dressing and wrapped in bacon.

A few times each week there is served a 10 cent hot plate which consists of a variety of fresh vegetables, a buttered muffin, a cheese or meat croquette or creamed meat, fish or mushrooms served on toast. In planning a plate of this kind we try to make it colorful by choosing vegetables of various colors and using a garnish that makes it appealing to the eye. We also serve a number of 10 cent salad plates which are popular with both teacher and pupil. One of these plates consists of a variety of fresh fruits, a slice of meat or cheese, a mixed salad, a small sandwich, half an egg and a mint.

There is the problem of taking care of the pupil or the teacher who has a diet complex. Newspapers and magazines have been extolling the value of the orange as a reducing fruit. We have made use of this publicity by using the orange with other foods which we feel the pupil needs. One salad which has become popular we call the "Wedding Ring Salad." On a bed of lettuce a chain of connecting orange rings is placed. In the center of the rings is a mound of marinated rice the top of which is decorated with julienned green peppers and pieces of orange in the form of a small flower with a cherry center. The name appeals to the pupil and, of course, the orange appeals to those who are diet-minded. To try to sell rice to these pupils would be a waste of time but disguised in this way it is eaten and relished.

For the same group we have been successful in selling a salad called "Greens." We mix with the greens hard cooked eggs, grapefruit and French dressing. The mere mention of a green salad sounds like a diet to them.

It is surprising how fruit gelatin appeals to the eye. One of our best sellers is what we call "Sunburst Salad." On a bed of lettuce or chicory we place a slice of pineapple in the center of which is a rosette of cream cheese garnished with a cherry or berry. From the center to the edge of pineapple, sections of orange and grapefruit radiate. Next, a border of golden and red fruit aspic to represent the sun's rays is placed around the edge of pineapple. Those who would not be attracted by a plain fruit salad like this arrangement. Since fresh vegetables and ripe fruits are the workers that provide essential mineral salts, we feel that when this salad is eaten all the work of preparation has been worth while.

The sale of ice cream has increased rapidly since we have begun decorating it with chocolate and fruit sauces. "Brownie à la mode" on the menu means a rush at the dessert counter.

Each holiday we make a big display of foods. On Christmas a turkey dinner is served for 10 cents with all the fixings. The dessert and salad counters look gay with all the seasonable dishes. On Valentine's and St. Patrick's days we decorate to suit the occasion with gelatin molds, love apples, heart-shaped cakes, shamrocks and mint jellies. Much can be made of these occasions.

We endeavor to provide the proper foods and to serve them attractively and are alert for new ideas to overcome the element of sameness, which causes dissatisfaction.

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You'll score instantly by serving sparkling Edelweiss cherry gelatine dessert, or any of the fifteen exquisite flavors. Imagine how such unusual flavors as banana, ginger ale, mint or apricot will tickle your patrons' palates! Visualize the colorful salads you can make! Consider what it means to be able to make at least an extra quart from the gallon size!

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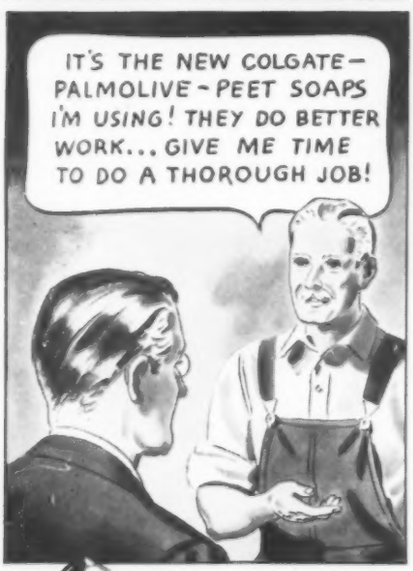

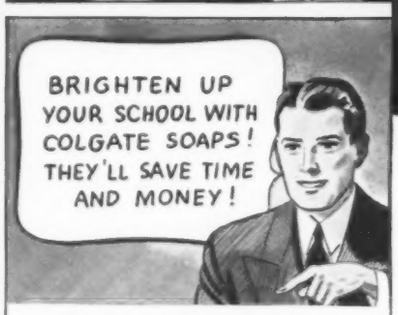

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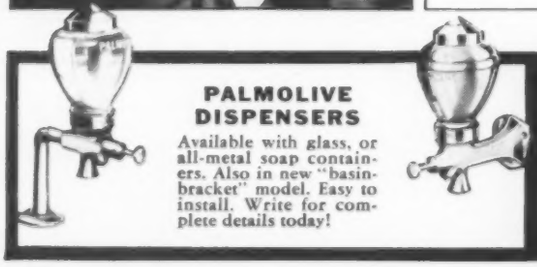

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No Candy!

MONICA CUMMISKEY

Supervisor, School Lunch Office
West Warwick General High School, West Warwick, R. I.

Alarmed at the increasing sums spent for candy, a quiet campaign was conducted at West Warwick, R. I., in which no candy was sold in cafeterias

THE school lunch service at West Warwick, R. I., serves a junior high school with a registration of 800 and a senior high school of about 550. The buying and preparation of food are centralized in the junior high school and the food is delivered to the senior high school for serving from a steam table. This plan has worked satisfactorily, making it possible to give close supervision with more concentrated work.

The supervisor of the school lunch is also supervisor of home economics and carries a light teaching program at the junior high school. She is assisted by two teachers in the home economics classes and has five paid workers and four pupil helpers. A small system has its compensations in that the combination job of school lunch supervisor and home economics supervisor affords a close correlation with all school activities.

The school lunch is governed by a committee composed of the two high school principals, the superintendent of schools and the supervisor of home economics and school lunch. This committee meets monthly, establishing the policies of the school lunch and passing upon all bills presented by the supervisor before they are submitted to the school board. The latter serves as a second check and then the bills are sent to the town treasurer for payment. No checks are signed by the school lunch supervisor, but all other bookkeeping is done in her office with the help of an occasional typist.

During ten years of operation the school lunch always has finished the year with a small profit after replacements and repairs. We take care of our own gas bills, telephone, paper supplies, wages, repairs, replacements, equipment, cleaning supplies and food supplies, and out of a year's accumulated profit we make our large replacements. Each month's business is complete in itself and the profits become town funds at the end of the year. The school lunch has no accumulated funds at its disposal other than bookkeeping profits but the school board has always granted every request for assistance.

During 1939-40 we became alarmed at the increasing sums spent for candy. We were serving good food but too small a percentage of the registration was availing itself of it. Money intended by parents for food was being spent for candy so, with the assistance of the superintendent of schools, we inaugurated a new plan beginning September 1940: "No candy is sold in our school lunchroom."

No issue has been made of it with the pupils and we have worked along quietly hoping for success. We have been much more successful than we dared hope, as the sale of milk has been tripled at the senior high school and doubled at the junior high school. The trays purchased by the boys and girls are improved in quality and more money is being spent for food. The daily receipts are larger than last year for the same months although the registration is smaller.

This quiet campaign has been difficult but effective. It would not have been possible without the cooperation of principals, administrative officers and homeroom teachers. Menus are posted in each room every Monday and suggestions are given by the homeroom teachers concerning the best choice. Parents are sent letters with sample menus and the local newspaper helps in spreading the aims of the school lunch to the home and the public.

After two months of experiment we feel we may now safely say that a school lunch can be run successfully without the sale of candy to pay its bills. It necessitates every ounce of tact we can summon, ingenuity, hours of hard work and loads of cooperation, however. In fact, this business of feeding boys and girls can be done successfully according to the rules of nutrition, health and finance only when every member of the school and the administration office are assisting the school lunch supervisor.

Typical Junior and Senior High School Lunch Menus for One Week

Menu	Monday	Tuesday	Wednesday	Thursday	Friday
Chowders and Soups 5 and 10c	Corn chowder Crackers	Vegetable soup	Beef stew	Beef stew Tomato soup	Quahaug chowder
Special Tray 15c	Escalloped ham and potatoes Waldorf salad Bread and butter Orange gelatin	Baked beans Dark bread and butter Garden salad Fresh fruit	Vegetable plate: 4 vegetables with bacon strips Bread and butter	Meat loaf Escalloped tomatoes Bread and butter Milk and cookie	Creamed salmon Wiggle on toast Cabbage or carrot slaw Fruit cup and cookie
Sandwiches 5c	Chicken salad Tomato and lettuce Peanut butter and jelly	Tomato and egg Sliced ham	Jelly and cream cheese Minced ham Ham and egg	Sliced bologna Tomato and lettuce Bacon and egg	Egg salad Tuna Tomato and lettuce
Suggestion	Guard Your Health With Protective Foods: They are milk, butter, eggs, fresh fruits and vegetables, dark bread, cheese.				
Salads 10c	Grapefruit and peach	Stuffed tomato	Pineapple sandwich	Jellied Sunset	Garden salad
Desserts 5c	Apricot whip Fruit gelatin	Marble pudding Fruit gelatin	Marshmallow Gingerbread	Chocolate Corn flake pudding	Fresh fruit cup Gelatin and cream

Ready to Serve: Pupil employes in the senior high school cafeteria, Niagara Falls, N. Y., are dressed in these uniforms which Helen J. Neff, cafeteria manager, has found satisfactory for the reason that they completely cover the girls' school-time dresses and sweaters during the period that they are serving.

Instructions for Counter Workers

MARGUERITE MOORE

Cafeteria Director, Central High School, Tulsa, Okla.

I. Personal Appearance:

1. Clean uniforms, headbands and small aprons.
2. Hair attractively covered with hair net.
3. Clean hands, face and nails, no bright polish.
4. If it is necessary to use handkerchief or to touch hair or face, go to the rest room and wash hands.

II. Instructions for Care and Service on Hot Counter:

1. Light gas or turn on steam. Be sure there is sufficient water in the steam table.
2. Place food on counter just before the beginning of the first lunch period.
3. Watch the setup of the counter so as to display foods attractively.
4. Keep dishes in neat stacks and properly arranged; be sure plates are warm for hot foods.
5. Keep pans of hot food replenished but serve fresh foods to each period. Be sure steam table is hot.
6. Keep servings of a standard size.
7. Have proper spoons and ladles or forks to serve food.
8. If speed is required, never dip food twice.
9. Study menu in order to know what food combinations are served on plate lunch.
10. Sample food and study the recipe to be able to answer any question asked by a pupil or faculty member.
11. Be able to make suggestions to pupils, naming dishes on the counter.
12. Endeavor to give service with a "smile."
13. Listen closely to orders.
14. Handle dishes with care.
15. Wipe off the edge of a plate if food is spilled in serving.
16. Do not handle food with the hands.
17. Throw in garbage can immediately any food accidentally dropped on the floor.
18. Clean the steam table and remove all equipment after the serving period.
19. Scrub the steam table pan every Friday.
20. Watch the drain; avoid spilling food in the steam table.

III. Points for Counter Checkers to Watch on Salads:

1. Use of proper salad plates.
2. Arrangement of salads on plates.
3. Crispness and freshness of lettuce; no overhanging of plate.
4. Attractiveness enhanced by an edible garnish.
5. Placement of salads on counter for color contrast.
6. Size of portions.
7. Coldness of salads.
8. Frequent replenishment of salad counter.

IV. Check List for Counter Display of Desserts:

1. Watch size and uniformity of portions.
2. Have an attractive arrangement of desserts; watch color combinations.
3. Space dishes evenly.
4. See that all dishes are clean around edges; be careful of sauces.
5. Replenish desserts frequently.

V. General Information for Counter Checker:

1. One checker for each counter, such as hot foods, salad and dessert counters.
2. Inspection of counters by each checker before the lines start, keeping in mind all points listed for hot food, salads and desserts.
3. Frequent checking of counters during lunch hour.
4. Contact with kitchen as to amount of food on counter and the probable quantity that will be needed.

VI. Milk:

1. Check the supply of milk.
2. Be sure the milk is cold.
3. Wipe off the bottles. Be sure the tops are dry.
4. Watch for dirty bottles.
5. Have a sufficient supply of straws.

VII. Bread, Sandwiches and Crackers:

1. Neat arrangement on tray.
2. Proper wrapping in waxed paper.
3. Arrangement of signs so that pupils can tell at a glance the kind of sandwich and the price.
4. Protection of crackers by means of glassine bags and neat arrangement on the tray.

FOOD FOR THOUGHT

To Revise Navy Cookbook

There are no complaints about the food the Navy serves, but its cookbook is going to be revised, nevertheless, by none other than Dr. Mary deGarmo Bryan, head of institution management, Teachers College, Columbia University. Whereas it is impossible to improve on beans à la navy, some of the other recipes were set up in the days before food preparation became such an exact science. Also, sailor eating habits, as well as the food habits of others, have changed with tastes leaning to fruit, vegetables and milk.

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News in Review

More on Textbook Issue

The textbook controversy, which may be either a "tempest in a teapot" or of real significance, depending upon the individual point of view, remains an issue with committees from both camps carrying on their own investigations, in addition to the textbook publishers themselves.

The National Association of Manufacturers has released a letter to members stating that the general criticism of textbooks expressed by Dr. Ralph W. Robey, Columbia University professor who abstracted 600 textbooks for the association, represented his "personal opinion" only.

Doctor Robey, who was aided by a staff of educators, charged that a substantial portion of social science textbooks belittled the American form of government and held the system of free business enterprise "in derision or contempt."

A committee of 10 outstanding social scientists has been set up by the American Committee for Democracy and Intellectual Freedom to combat the censorship threat inherent in the textbook investigation, it was announced by Dean Ned H. Dearborn of New York University, the committee's national chairman.

The original board of experts, which has been enlarged considerably since its formation, consisted of the following: Profs. Wesley C. Mitchell, Robert S. Lynd, Robert M. MacIver, Arthur W. MacMahon and Carl Shoup of Columbia University; Prof. Ernest Minor Patterson of the University of Pennsylvania; Prof. Harold M. Groves; Dean Carl Wittke of Oberlin College; Prof. Arthur G. Coons of Claremont Colleges, and Dr. Leo Gershey of Sarah Lawrence College, Bronxville, N. Y.

Doctor Dearborn stated that each expert will be asked to examine one of the textbooks involved to test the accuracy of the N.A.M. abstract and then to prepare a brief factual statement analyzing the general character of the book and the defensibility of the point of view expressed.

Another protest was voiced against the investigation by the National Council for Social Studies at its Atlantic City convention in March. A statement, drafted by the council's committee on academic freedom, stated:

"The implication, and at times the downright allegation, that teachers, administrators, textbook authors and publishers are delinquent in their patriotic duty and in discharge of their professional ability is unjust and misleading and brings discredit upon the whole school system."

The question is discussed in a memorandum, "Free Schools in American Democracy," issued by the Council for Democracy, 285 Madison Avenue, New York City. While in a democracy it is a healthy thing to have all citizens take an active interest in the school system and while educators welcome public interest and impartial criticism, no pressure groups should be allowed to impose their standards of value on the schools, the memorandum points out. Prepared with the aid of the committee of correspondence, a group of scholar consultants, the memorandum is available at a small charge.

SUMMER COURSES

Air Conditioned Workshops

This summer the University of Colorado will conduct a three division workshop. One division is for those who wish to work on problems of curriculum; another is for counselors, and a third is for administrators. All workshops will be housed in air conditioned rooms on one floor of the university's new library, with adjoining offices and conference rooms.

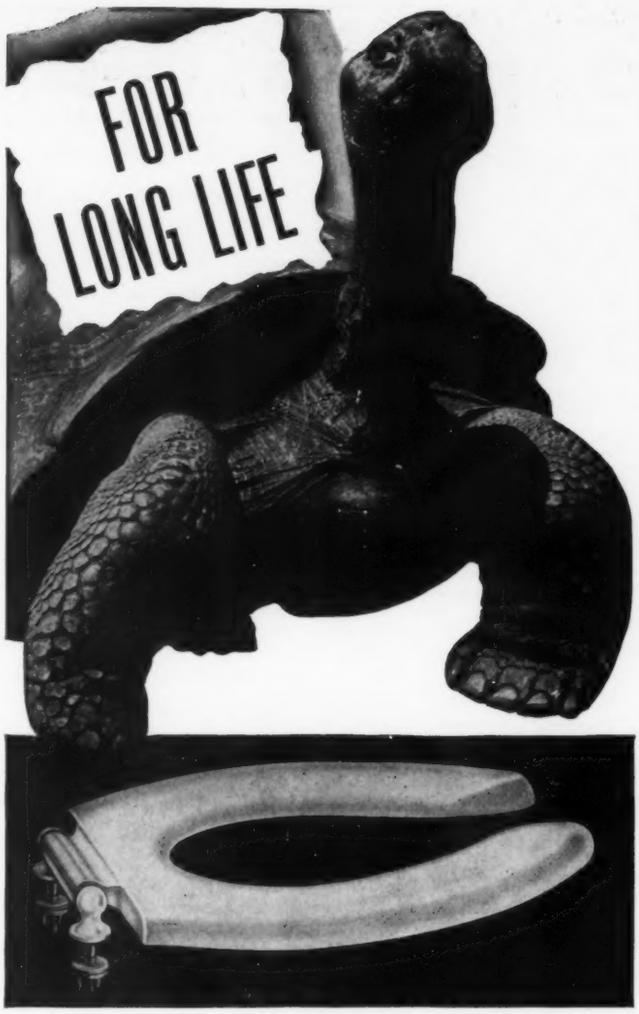
In charge of the curriculum laboratory will be Dr. Derwood Baker, superintendent, Boulder, Colo. The assistant director will be Mildred Biddick of the Denver public schools.

The guidance workshop will have the following staff members: Dr. Gilbert Wrenn, University of Minnesota; Dean Eloise Ward, Southeastern Colorado Junior College, Lamar; Laurence Ross, high school boys' adviser, Greenville, S. C., and John B. Schoolland, Clifford Houston and Harl Douglass, all professors at the University of Colorado.

Assisting Dr. Calvin Grieder, who is in charge of the administrators' laboratory, will be eight members of the local and visiting staff, including Dr. Arthur W. Clevenger, University of Illinois; Supt. Ralph Jenkins, Englewood, Colo., and Doctor Douglass, director of the college of education, University of Colorado.

School for Custodians

The summer session of the School for Engineers and Custodians of Buildings at the University of Minnesota will be held June 16 to 20, it has been announced by Thomas A. H. Teeter, associate professor of engineering at the



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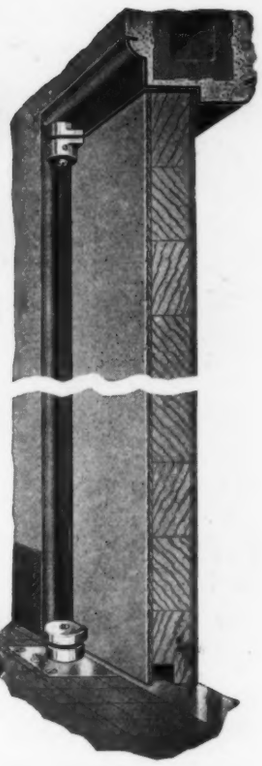

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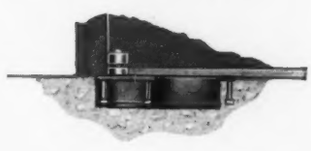

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The courses will be based on subjects found to be most valuable during the twenty years that Minnesota has conducted such instruction. There will be available as mediums of instruction abundant laboratory facilities, apparatus and equipment, together with demonstration schools.

Instruction will combine lecture, conference and demonstration; each lecture will be followed by a conference and by visits to buildings in the Minneapolis public school system and on the University of Minnesota campus.

MEETINGS

Eastern Art Educators

More than 1500 persons are expected to attend the annual convention of the Eastern Arts Association, which is to be held at the Pennsylvania Hotel, New York City, April 16 to 19. There will be exhibits of art work from grade schools, high schools and professional art schools. Exhibits of materials and equipment will acquaint art teachers with new teaching aids.

Food Service Directors

The Conference of Food Service Directors will be held at the Hotel Commodore, New York City, November 6 to 8, it has been announced by Grace Helene Miller of Brooklyn, N. Y., the local chairman. The keynote of the meeting will be "The School Lunch and National Defense."

Exhibitors Name Officers

At the annual meeting of the Associated Exhibitors held during the Atlantic City convention of the A.A.S.A., H. C. Grubbs of Erpi Classroom Films, Inc., was elected president. Elliott C. Spratt of the Hillyard Sales Company was chosen vice president and Paul Crabtree of Caproni Galleries, Inc., secretary-treasurer. The new directors elected were: M. C. Stolting of Chicago Apparatus Company; John Nesbitt Jr., John J. Nesbitt, Inc., and Allen Newbury of the Macmillan Company.

Approximately 12,000 people witnessed the presentation of the 1941 American Education Award to Dr. Frank P. Graves by A. M. Stonehouse, retiring president of the exhibitors, at the convention.

Rotary Elects Anderson

Homer W. Anderson, superintendent of schools, St. Louis, was elected president of the Schoolmasters' Rotary Club

Coming Meetings

March 28-29—Midwestern Forum on Visual Teaching Aids, Chicago.
April 3-5—North Carolina Education Association, Asheville.
April 4—Arbor Day.
April 6-9—California-Western Music Educators Conference, San Jose, Calif.
April 9-11—Inland Empire Education Association, Spokane, Wash.
April 9-12—Eastern Commercial Teachers Association, Boston.
April 15-18—National Catholic Educational Association, New Orleans.
April 16-17—Eastern Arts Association, New York City.
April 16-19—Southwestern Music Educators Conference, Wichita, Kan.
April 18—Bird Day.
April 30-May 3—N.E.A. Department of Health, Physical Education and Recreation, Atlantic City, N. J.
May 1-3—Eighth Annual National Folk Festival, Constitution Hall, Washington, D. C.
May 2-7—Eastern Music Educators Conference, Atlantic City, N. J.
May 5-9—American Association of University Women, Cincinnati.
May 5-11—National Music Week.
May 14-22—National Congress of Parents and Teachers, Boston.
May 21-28—National Board of Fire Underwriters, New York City.
June 19-21—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.
June 20-21—Ohio Education Association, Cedar Point, Ohio.
June 22-July 13—California Adult Education Workshop, Mills College, Calif.
June 29-July 3—National Education Association, Boston.
July 8-12—Association for Childhood Education, Child Study Conference, Oakland, Calif.
Oct. 9-11—Utah Education Association, Salt Lake City.
Oct. 16-18—Wyoming Education Association, Cheyenne.
Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.
Oct. 22-25—New Mexico Educational Association, Albuquerque.
Oct. 23-24—New Hampshire State Teachers Association, Nashua.
Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.
Oct. 24-25—Maryland State Teachers Association, Baltimore.
Oct. 29-31—West Virginia State Education Association, Charleston.
Oct. 29-31—North Dakota Education Association, Minot.
Oct. 29-31—Maine Teachers Association, Bangor.
Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.
Nov. 6-8—Conference of Food Service Directors, New York City.
Nov. 6-8—Iowa State Teachers Association, Des Moines.
Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.
Nov. 7-9—New Jersey Education Association, Atlantic City.
Nov. 13-15—Arizona Education Association, Phoenix.
Nov. 18-21—Virginia Education Association, Richmond.
Nov. 20-22—Texas State Teachers Association, Houston.
Nov. 26-29—Missouri State Teachers Association, St. Louis.
Dec. 29-31—Pennsylvania State Education Association, Harrisburg.
Dec. 29-31—Illinois Education Association, Chicago.

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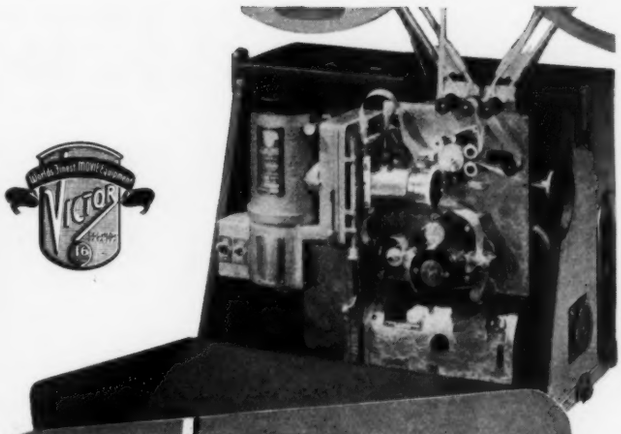

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at its twenty-fourth annual meeting held during the A.A.S.A. convention in Atlantic City. Raymond C. Burdick of Huntington, N. Y., was reelected secretary-treasurer.

S. T. Neveln, superintendent at Austin, Minn., presided at the luncheon, which was addressed by Herold C. Hunt, a former district governor of Rotary International. Mr. Hunt is superintendent at Kansas City, Mo.

Heads Secondary Principals

John E. Wellwood, principal of the Central High School at Flint, Mich., has succeeded Oscar Granger of Upper Darby, Pa., as president of the National Association of Secondary School Principals, an organization of 10,000 of the nation's high school principals. Other officers named included: Virgil M. Hargin, Pitkin and Reed Junior High Schools, Springfield, Mo., first vice president; Hugh H. Stewart, Davis High School, Mt. Vernon, N. Y., second vice president, and Paul E. Elicker, Washington, D. C., secretary-treasurer.

Those elected to the executive committee included E. R. Jobe, Mississippi state supervisor of secondary education; Truman R. Reed, Lewis and Clark High School, Spokane, Wash., and Wilfred H. Ringer, Brookline High School, Brookline, Mass.

Film Releases

On the Road to Acapulco—A 16 mm. sound color film that portrays the famed beauty of old Mexico with a background of appropriate Mexican music. 2 reels. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York City.

Way of Life—One of a series of 16 mm. sound films on Central America, giving valuable information on customs, government, educational standards, industries and habits of the people. Among the countries pictured are Mexico, Costa Rica, Honduras, Guatemala. There are eight pictures in the series, each 1 reel sound: Zapotecan Potters, Coffee Democracy, Boys of Atitlán, Mayaland Today, Net Fishers of Patscuaro, City of Living Ruins, Silver Mountain Country and Honduras. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York City.

Modeling a Portrait—A film that demonstrates all the steps to be taken in building up a portrait in clay, as the basic work in sculpture, by Mr. and Mrs. Simon Moselsio of the art division of Bennington College, Bennington, Vt. Mr. Moselsio does the modeling and Mrs. Moselsio, the camera work. The many closeups help to give the audience a kinesthetic sense of actually participating in the action. The film opens with the building of the armature. The clay is then conditioned and formed into an egg shape for the portrait before the model arrives for the sitting. The second reel shows the sculptor refining the portrait and comparing it with the model as he goes along. Various tools are demonstrated in use. Characteristics of various materials are considered as the sculptor decides upon the medium into which the clay will be translated for permanence. 16 mm., silent. Harmon Foundation, Inc., 140 Nassau Street, New York City.

How to Make a Plaster of Paris Cast—Another 16 mm., silent film subject by the Moselsios showing the complete technic of making a plaster of Paris cast from a clay portrait. A unique feature of this film is that the photography was carried on entirely during the process with no opportunity for changing scenes, rephotographing or stage setting. Continuous action was essential; plaster of Paris is quick drying and requires sure strokes in all its procedures. The films are intended for use in art classes, for vocational guidance or by clubs studying art technics. Harmon Foundation, Inc., 140 Nassau Street, New York City.

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Films in Review

HEREDITY. 16 *mm., sound.* 400 *feet.* 1 *reel.* 12 *minutes. Erpi Classroom Films, Inc.,* 35-11 *Thirty-Fifth Avenue, Long Island City, N. Y. Subject: biology, agriculture, physiology. Grades* 10 *to* 12. *Rating C—.*

The picture demonstrates the Mendelian law governing heredity. Animated drawings show how the genes of black and white, long and short haired guinea pigs unite in various combinations to produce offspring that repeat the characteristics of the parents. The pictures are supplemented by a lecture that attempts to explain some of the more obscure points, such as the effect of dominant and recessive traits. A practical application of the law is shown in the breeding of cattle.

It would appear that the use of some less expensive medium, such as shorts, slides or several slide films, could be made equally effective in teaching this topic. Most high school pupils would have difficulty following the lecture and careful groundwork would have to be laid before the film could be used successfully. The most practical use would

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If you don't have the *1941* B&H Filmosound Library Catalogs, get them now. They are expanded source books of select films, reviewed objectively and newly arranged for your convenience. Free to projector owners; 25c each to others. Mark coupon for your copies.

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be for review purposes after the subject had once been taught. The value of the film would have been increased had it shown how the law operates in the plant world, as well as with the animals.—*Reviewed by* RALPH U. SWISHER.

NOTE: The foregoing film was reviewed by a committee on evaluation functioning at the University of Michigan. Rating C indicates that the film has classroom value but that careful groundwork is needed.

FINANCE

Would Cut Costs of Rural Schools

Belief that a cut in state aid would discourage the continuance of one room schools in New York State was expressed in a report submitted last month to the New York State General Assembly by the Rapp-Coudert legislative committee, which has been investigating education

On the Air During April

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System, the Mutual Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Sundays

11:30 a.m.-12:00 noon—Music and American Youth (NBC Red).
1:00-1:15 p.m.—I'm an American. A series devoted to expositions by distinguished naturalized Americans of the privileges and responsibilities of the democratic way of life (NBC Blue).
1:00-1:15 p.m.—March of Health (MBS).
1:30-2:00 p.m.—On Your Job. Dramas of America's work and workers, based on research by Frank Ernest Hill of the American Association for Adult Education (NBC Red).
1:30-2:00 p.m.—Sundown on the Veldt. Josef Marais in folk songs of the African Bushveld (NBC Blue).
2:00-2:15 p.m.—American Pilgrimage. Broadcasts from the homes of famous American authors (NBC Blue).
2:00-2:30 p.m. — Free Company Broadcasts (CBS).
2:30-3:00 p.m.—University of Chicago Round Table (NBC Red).
2:30-2:45 p.m.—Foreign Policy Association Program (NBC Blue).
3:00 p.m.—New York Philharmonic-Symphony Orchestra. Directed by John Barbirolli. Deems Taylor, commentator (CBS).
3:00-4:00 p.m.—Great Plays. A series of masters' works tracing the development of drama (NBC Blue).
4:30-5:00 p.m.—The World Is Yours. Produced by U. S. Office of Education and Smithsonian Institution (NBC Red).
4:30-5:00 p.m.—Pageant of Art. The dramatic story of fine arts through the ages (NBC Red).
8:00-8:45 p.m.—American Forum of the Air (MBS).
8:00 p.m.—Columbia Workshop. Produced by Douglas Coulter, CBS director of broadcasts.

Mondays

9:15-9:45 p.m.—American School of the Air: "Americans at Work" (CBS).[2]
2:30-3:00 p.m.—Rochester Civic Orchestra (NBC Blue).
3:45 p.m.—Columbia's Lecture Hall. Lectures on a variety of subjects by eminent speakers (CBS).
10:00-10:15 p.m.—Story-Dramas by Olmsted. Dramatized versions of the world's great short stories. Nelson Olmsted portrays all of the characters in his dramas. Mondays, Tuesdays and Wednesdays (NBC Blue).
10:30-11:00 p.m.—Adventure in Reading (NBC Blue).
10:30-11:00 p.m.—Cavalcade of America (NBC Red).

Tuesdays

9:15-9:45 a.m.—American School of the Air: "Wellsprings of Music" (CBS).
2:30-3:00 p.m.—United States Army Band. Capt. Thomas F. Darcy, conductor (NBC Blue).
3:45 p.m.—American Transition (CBS).
9:30-9:55 p.m.—Unlimited Horizons (NBC Blue).

Wednesdays

9:15-9:45 a.m.—American School of the Air: "New Horizons" (CBS).
2:15-2:30 p.m.—Echoes of History. General Federation of Women's Clubs, producer (NBC Blue).
3:45 p.m.—Children Also Are People (CBS).
8:00-8:30 p.m.—Quiz Kids. These children from the schools of Chicago and vicinity, all under 15, reveal an amazing fund of information (NBC Blue).
10:30-11:00 p.m.—Doctors at Work. Sixth annual health series presented by the American Medical Association (NBC Blue).

Thursdays

9:15-9:45 a.m.—American School of the Air: "Tales From Far and Near" (CBS).
12:00 noon-12:15 p.m.—Conservation Reporter (MBS).
12:15-12:45 p.m.—Navy School of Music (MBS).
3:45 p.m.—Adventures in Science. This program is planned in conjunction with Science Service (CBS).
9:35-10:30 p.m.—America's Town Meeting of the Air (NBC Blue).
10:30-11:00 p.m.—The Listeners' Playhouse (NBC Red).
10:30-11:00 p.m.—Musical Americana. Programs of American music with symphony orchestra and mixed chorus directed by Raymond Paige (NBC Red).

Fridays

9:15-9:45 a.m.—American School of the Air: "This Living World" (CBS).
2:00-3:00 p.m.—Music Appreciation Hour. Directed by Walter Damrosch (NBC Blue).
3:45 p.m.—Exploring Space (CBS).
4:15-4:45 p.m.—University Life (MBS).
11:15-11:30 p.m.—The Story Behind the Headlines. Produced in cooperation with the American Historical Association. Cesar Saerchinger, commentator (NBC Red).

Saturdays

12:00 noon-12:25 p.m. — American Education Forum. Designed to interest laymen as well as educators (NBC Blue).
12:30 p.m.—Highways to Health (CBS).
12:45 p.m.—Jobs in National Defense (CBS).
1:00-1:30 p.m.—Let's Pretend. Nila Mack (CBS).
2:00-5:00 p.m.—Metropolitan Opera (NBC Blue).
2:30-3:00 p.m.—Of Men and Books. Prof. John T. Frederick, Northwestern University (CBS).
5:00-5:30 p.m.—The World Is Yours. Produced in cooperation with the U. S. Office of Education and the Smithsonian Institution (NBC Red).
7:00 p.m.—People's Platform. Round table discussion of social, economic and political problems, Lyman Bryson, chairman (CBS).
8:15-8:30 p.m.—Man and the World. Produced in cooperation with the Chicago Museum of Science and Industry and the American Museum of Natural History of New York. A new series devoted to the men of science and their achievements (NBC Blue).
9:35-11:00 p.m.—NBC Symphony Orchestra (NBC Blue).

[1]Except Sunday.
[2]The American School of the Air will be broadcast over the Columbia Broadcasting System stations from 9:15 to 9:45 a.m. E.S.T.; 2:30-2:55 p.m.; C.S.T.; 9:30-10:00 a.m., M.S.T., and 2:00-2:30 p.m., P.S.T.

costs and subversive activities in New York public schools.

Exceptions to the reduction would be made, however, for schools in isolated areas where transportation of pupils to central district schools would be too costly.

A survey of one room schools, it was said, showed that average state contribution per child was $312.

The report proposed the adoption of a state-wide master plan for centralization of rural school districts and changes in the education law designed to effect savings to the taxpayers.

Another section of the report recommended a reduction in the cost of central school buildings. Bills to carry out these two recommendations have been introduced into the legislature by the assembly members making the study of educational finance.

There were 500 one room schools that had less than five pupils in daily attendance, the report pointed out. It was estimated that under the committee's plan the state would save $260,000 annually.

INSTRUCTION

Preparing Series on the Negro

A new series of programs dramatizing Negro contributions to American life is being prepared by the U. S. Office of Education under a grant from the Rosenwald Foundation. The programs, to be broadcast nationally, will portray the rôle Negroes have played in American education, art, science, industry and other fields of endeavor. Plans call for transcriptions of the programs for use in schools, colleges and local radio stations.

School Builds a Telescope

Some science pupils at the Garden City High School, Garden City, N. Y., suggested that the high school make its own reflecting telescope. How this feat was achieved is told in *New York State Education* by John Orban Jr., who supervised the project.

The Garden City board of education paid the tuition of Mr. Orban in a course in telescope making at the Hayden Planetarium so that he might supervise construction of a telescope in the high school. Mr. Orban brought back drawings, plans and suggestions as to the type of instrument best fitted for high school use. Ideas were gathered from here and there and finally all rough sketches were turned over to the art department. From that material, pupils made a large drawing of the necessary parts and an imaginative sketch of the finished instrument.

The large sketch was then released to

passes the exams!

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the school paper. The interest of other pupils was now aroused and library books on astronomy moved quickly.

A construction crew was selected, comprised of artists, machinists, capable draftsmen and helpers to do the rough work of grinding and polishing.

Boys in mechanical drawing classes took measurements from rough sketches and art department drawings and made them into plans. The plans were checked and blueprints were made. These were turned over to the industrial arts pupils and theirs was the task of turning these plans into a telescope of iron, aluminum, brass and steel.

Pupil interest ran high and Mr. Orban was pushed to keep abreast of pupil work. Just before Easter, the school was urged to enter the telescope in the Science and Engineering Fair sponsored by the American Institute at the Museum of Natural History. Mr. Orban consented reluctantly, since the project was originally undertaken to provide for a definite need and not for competition.

The deadline was the first week in May and the crew wanted to work during the Easter vacation. Permission was granted. One end of the shop was transformed into a drafting room and another part set aside for assembly as soon as the finished parts came off the lathes. Each morning during the two weeks' vacation the boys arrived at 8:30 o'clock and worked their regular "union" hours till late afternoon, when they usually finished the day with a little badminton in the gymnasium.

The telescope, minus the mirror, was completed in time to be entered in the science fair. Two members of the crew were stationed there daily to explain its construction and the finished blueprints to the thousands of visitors.

The "Big Eye" received first prize in its class and was given individual awards for technical skill, creative ability and as an outstanding example of scientific thinking. Further honors came when officials of the Westinghouse Electric Company asked that it be placed atop their building at the New York World's Fair so that visitors might use it evenings. An unexpected outcome of this was the employment of crew members to demonstrate it to visitors.

Since the close of the fair it has been returned to the school and at present is housed in an observatory now partially completed.

An instrument of this type, if purchased, would cost more than $1500; the cost of this telescope was approximately $200. Twenty-four pupils worked on it, including some girls who worked on polishing and buffing. The total pupil hours was well over 1200. It stands more than 9 feet high and has an 8 inch mirror, which gives it a top magnification of 256 times.

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PUBLICATIONS

Tolerance for Minority Groups

The Council Against Intolerance in America has announced publication of "We're All Americans," a manual for elementary school teachers. Ten stories about children who belong to minority groups in America form the core of the manual.

The manual has been in preparation for eighteen months, having been used experimentally by teachers in the New York area and edited upon the basis of their experiences with the stories and suggested activities. This and other publications of the Council Against Intolerance is free of charge to teachers and others engaged in school work. Requests should be addressed to the council, Lincoln Building, New York City.

Antidote for Lurid Comics

As an antidote for lurid comic magazines being widely read by children in

spite of the increasing protests of their parents and teachers, a new bi-monthly magazine for boys and girls of all ages called *True Comics* is being launched by the publishers of *Parents'* magazine. *True Comics* is similar only in format to the present comic magazines. In full color, it deals with exciting events of history and of current events. In the first issue of the new magazine, of which David T. Marke, young historian, is editor, the life of Winston Churchill is featured in 17 pages as "World Hero No. 1."

The 60 Textbooks of 1941

The third annual exhibition of textbooks under sponsorship of the Textbook Clinic of the American Institute of Graphic Arts will be opened to the public on May 16 at the New York Public Library. The exhibition will consist of 60 books chosen by a jury of five persons on a basis of artistic and technical excellence and of suitability, so far as format is concerned, to instructional purposes.

Revised Building Standards

The National Council on Schoolhouse Construction announces the publication of School Building Standards, including 1940 revisions. Copies may be obtained from Prof. Ray L. Hamon, Peabody College, Nashville, Tenn., for 50 cents.

NAMES IN NEWS

Superintendents

SUPT. CLAUDE L. KULP, Ithaca, N. Y., has been appointed New York State director of civic education for national defense for out-of-school youth. He has been granted a leave of absence from his present duties in order to direct this special part of the state program of citizenship training.

LAWRENCE A. BARRETT, for eleven years high school principal, Salida, Colo., has been appointed superintendent at Salida to succeed the late SUPT. L. D. HIGHTOWER, who died recently of a heart attack. L. E. KING, language teacher at Salida, was named high school principal.

G. V. KINNEY, superintendent of schools at Red Wing, Minn., has announced he will resign August 1.

E. A. T. HAPGOOD, superintendent, Mount Morris, N. Y., recently was reappointed for the seventh consecutive year. Prior to his appointment at Mount Morris, Mr. Hapgood for sixteen years served as director of vocational education and principal of the Industrial High School, Albany, N. Y.

DR. FRANK J. O'BRIEN of Scarsdale, N. Y., director of the bureau of child

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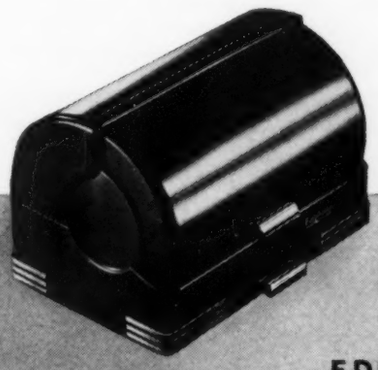

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guidance, has been appointed an associate superintendent of schools in New York City.

L. B. PEAK, for the last six years principal of the high school at Sulphur, Okla., has been named superintendent at Sulphur. He will replace LLOYD POWER.

RICHARD B. GREENMAN, former teacher and coach at the Fenn School, Concord, Mass., for three years, has been appointed superintendent and high school principal at Acton, Mass., succeeding the late WALTER F. HALL.

GEORGE SANBERG, superintendent at Rochester, Minn., will retire July 1.

County Superintendents

HARRY B. PICKERING recently was awarded a new three year contract as superintendent of schools, Greene County, Ohio.

DANIEL J. RICKER, former superintendent at Cape May, N. J., has been appointed superintendent of schools of Cape May County, New Jersey.

HARVEY K. HENDRICKSON, principal at Grandview, Ind., has been elected superintendent of schools, Warrick County, Indiana.

State Departments

MAX U. BILDERSEE of New York City has been appointed associate supervisor of radio education in the bureau of radio and visual aids of the New York State Education Department.

Private Schools

DR. CHARLES S. TIPPETTS, dean of the school of business administration, University of Pittsburgh, has been chosen headmaster of Mercersburg Academy, Mercersburg, Pa., to succeed DR. BOYD EDWARD.

HARWOOD ELLIS of Brookline, Mass., has been appointed headmaster of the Cincinnati Country Day School, succeeding MAJ. HERBERT SNYDER, who was called to active duty in the Army.

DR. MITCHELL GRATWICK has been named headmaster of Hackley School, Tarrytown, N. Y. Doctor Gratwick attended Phillips Andover Academy and Harvard College. He served as assistant dean of Harvard from 1927 to 1929 and from 1929 to 1931 he was headmaster at Nichols School, Buffalo, N. Y. He received the M.D. degree from Johns Hopkins University medical school in 1936 and was appointed assistant physician at Phillips Andover Academy in 1939.

HARRIET SHELDON has been appointed headmistress of the Ellis School, a private day school for girls, Pittsburgh, beginning in September. She succeeds SARA F. ELLIS, who is retiring.

MARGARET TROTTER, headmistress of Albany Academy for Girls for eleven years, Albany, N. Y., has announced she will resign July 1.

Principals

HARRIET S. EMMONS, principal of Rundlett Junior High School, Concord, N. H., has submitted her resignation to the board of education.

W. M. EDMONDS has been elected principal of the high school at Glenwood, Tex. He replaces J. C. MCMILLAN, who resigned to accept a position with the Texas State Department of Education.

ROBERT HOWE of Mount Morris, N. Y., has been appointed principal of the high school at Whitesville, N. Y., succeeding CHARLES MAY, who recently was appointed superintendent for the second school district of Livingston County, New York.

DR. J. EDWIN LODER, principal of the Havelock High School, Lincoln, Neb., has been named principal of the new Northwest High School, Lincoln.

WEST A. BURDICK has been elected director of the newly organized vocational school at Rice Lake, Wis. He

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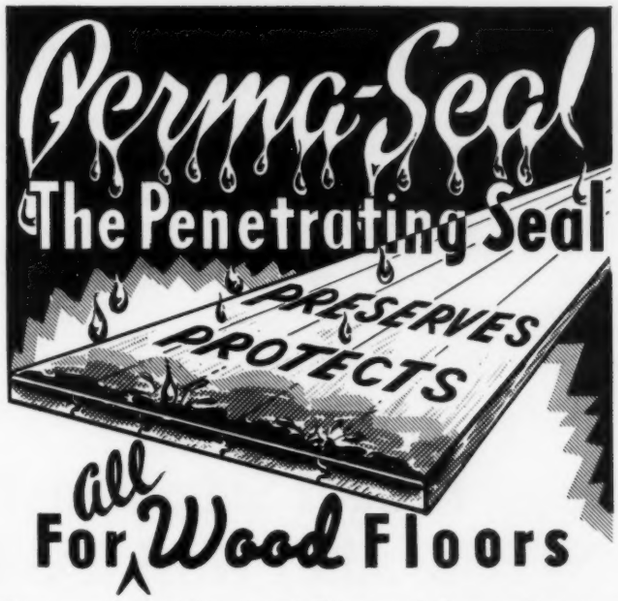

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has been a teacher at the vocational school, Madison, Wis., for more than eleven years.

WAYNE FOUST has resigned as principal of the Daviess County High School, Owensboro, Ky. SHELDON REYNOLDS, high school faculty member, was appointed his successor.

MORRISON BROWN, supervising principal of the Penn Township Consolidated School, near Duncannon, Pa., for the last eight years, has resigned to accept a position as head of the English department at the Carson Long Military Institute, New Bloomfield, Pa. PAUL F. HURLEY, who has been teacher of the sixth grade in the school, was elected principal by the school board.

MARION D. JEWELL has been named principal and assigned to Julia Richman High School, New York City. At the same time the board of education appointed five other high school principals: EDNA FICKS, Girls' Commercial High School; LEO R. RYAN, New Utrecht High School; LUDWIG KAPHAN, Thomas Jefferson High School; SAMUEL D. MOSKOWITZ, Eastern District High School, and ARTHUR KLEIN, Morris High School.

EMORY JANUARY has presented his resignation as principal of the Martin Van Buren High School, Kinderhook, N. Y., to take effect after the close of the school year. HAROLD C. TYSON, principal of the Rye Neck High School at Mamaroneck, N. Y., has been named his successor.

SARAH BAKER, dean of girls, has been named acting principal of the high school at Peekskill, N. Y., during the absence of DR. ERNEST M. QUITTMEYER, who is on leave of absence.

BERNARD F. WILSON, has been elected principal at Addison, N. Y.

DR. ROSS L. NEAGLEY of Media, Pa., has been appointed supervising principal at Newtown, Pa., to succeed A. KURTZ KING, who resigned to accept the post as head of the Bensalem Township Schools.

CHARLES M. MERRY, principal of Hughes High School, Clifton Heights, Cincinnati, will retire at the end of the school year.

SUBMASTER CHARLES M. FROLIO has been appointed principal of Abington High School, Abington, Mass., beginning March 1.

JAMES ADAMS is the new principal of the Triune High School, Triune, Tenn., succeeding JOE BORTHICK, who resigned to accept a faculty post at Bethesda High School, Bethesda, Tenn.

RUSSELL JOHNSON, who has been speech instructor at Tech High, Memphis, Tenn., has been appointed to succeed the late C. T. TORREYSON as principal of Lauderdale School, Memphis.

LAWRENCE A. WHEELER has resigned as high school principal at Johnson City, N. Y. MRS. MATILDA E. BROWN is the acting principal.

LLOYD F. MCINTYRE, head of the social studies department of Boynton Junior High School, Ithaca, N. Y., has been made acting principal of the east district elementary schools at Ithaca.

GEORGE A. SANDERS was elected principal of Park School, Columbus, Kan., recently, succeeding LAURANCE MULLIKEN.

PHILIP H. RINEHART, principal of Herron Hill Junior High School, Pittsburgh, has been named to succeed H. E. WINNER as principal of South Hills High School, Pittsburgh. Mr. Winner will retire April 1. J. D. MCCLYMOND, vice principal at Herron Hill, will become principal there.

JOHN W. TURNER, supervising principal at Shortsville High School, Shortsville, N. Y., recently was elected principal of Chautauqua Central School, Chautauqua, N. Y., to succeed GEORGE R. RAYNOR, who is retiring.

HEATH WHITE, superintendent, Bridgeport, Conn., has announced that ARTHUR

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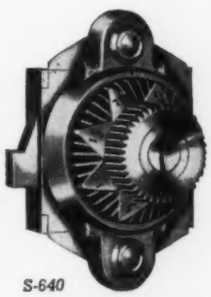

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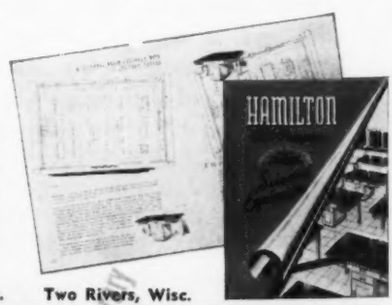

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CEBELIUS, mathematics teacher at Bedford Junior High School, has been named principal of a new junior high school at Rocky Hill, Conn. Mr. Cebelius will complete the current school year at Bridgeport and will assume his new duties at Rocky Hill in September.

T. C. WILLIAMS has been reelected superintendent at Alexandria, Va., for a four year term.

KATHARINE C. V. SULLIVAN, principal of James Madison Morton Junior High School, Fall River, Mass., since its opening fifteen years ago, retired March 1.

LILLIAN M. MURPHY has retired as principal of Public School 198, Brooklyn, N. Y., to become technical supervisor of the W.P.A. Remedial Reading Project.

WALTER LINTON, high school instructor, has been named principal of Newton Township High School, Miami County, Ohio, to succeed J. A. PECSOK, who resigned to accept a position in the Toledo schools.

NELLIE M. QUINN has been appointed principal of McKinley High School, Chicago. CELESTINE M. IGOE, principal of the Bass Elementary School, will succeed Miss Quinn as principal at Parker High School, Chicago.

WARREN E. HERTENSTEIN, high school principal at Wayland, N. Y., for the last eight years, has accepted the high school principalship at Watkins Glen, N. Y., effective next September.

CARL AMUNDSEN, high school principal at Faribault, Minn., has been chosen principal of Central High School, Superior, Wis.

HOMER DELONG has been chosen principal of the junior-senior high school at Antigo, Wis.

W. C. HALLER, 37 year old principal of Stonewall Jackson Junior High School, Oklahoma City, Okla., has been promoted to the principalship of Capitol Hill Senior High School of that city.

KATHERINE C. V. SULLIVAN, principal of the James Madison Morton Junior High School, Fall River, Mass., has petitioned for retirement March 1.

ROBERT HOWE has been named high school principal at Whitesville, N. Y.

CLIFFORD DEVAULT has been appointed to succeed CLIFTON HAGEWOOD as principal of the Kingston Springs High School, Kingston Springs, Tenn. Mr. Hagewood has enlisted in the U. S. Army Air Corps.

DR. C. B. HEINLY, supervising principal of the William Penn Senior High School, York, Pa., will retire at the close of the school year.

In the Colleges

DR. CLAYBROOK COTTINGHAM has been named president of Louisiana Polytechnic Institute, Ruston, and DR. JOE FARRAR has been appointed president of Louisiana Normal College, Natchitoches, by the state board of education. DR. LEON J. CLARK was reelected president of Southwestern College at Hammond, La., at the same time.

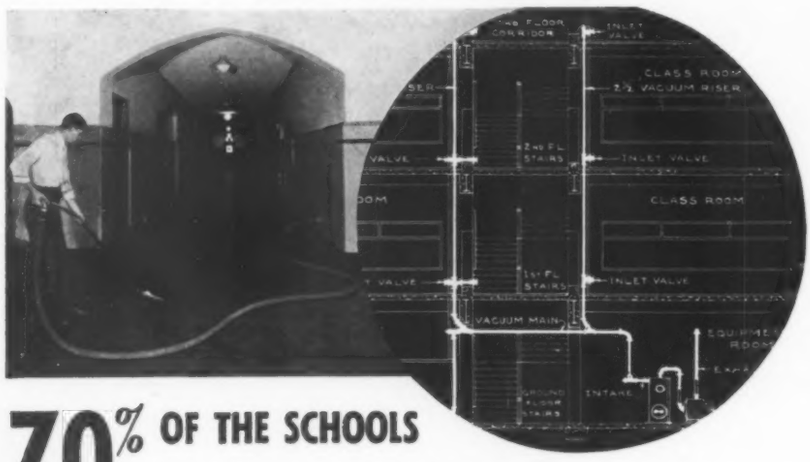
DR. DAVID D. HENRY, executive vice president, Wayne University, recently was chosen by the Detroit Junior Board of Commerce as recipient of the Detroit Distinguished Service Award for 1940.

PLINY H. POWERS, superintendent, Youngstown, Ohio, has been appointed chairman of the department of administration and supervision, school of education, New York University, to succeed ALBERT B. MEREDITH, who is retiring.

MAJOR GENERAL CAMPBELL B. HODGES, commander of the Fifth Army Corps, has been elected president of Louisiana State University, succeeding JAMES MONROE SMITH. This appointment will become effective July 1.

MARION THOMPSON WRIGHT has been appointed assistant professor of education, Howard University, Washington, D. C.

ANDRE MAUROIS of the French Academy will be visiting professor of French



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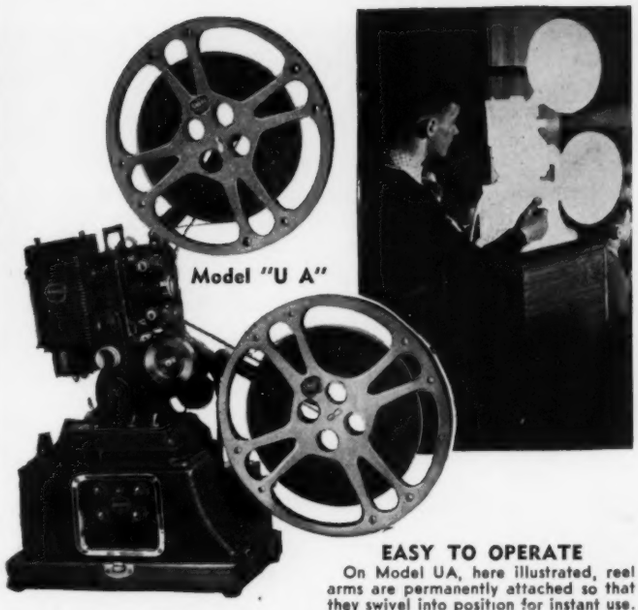

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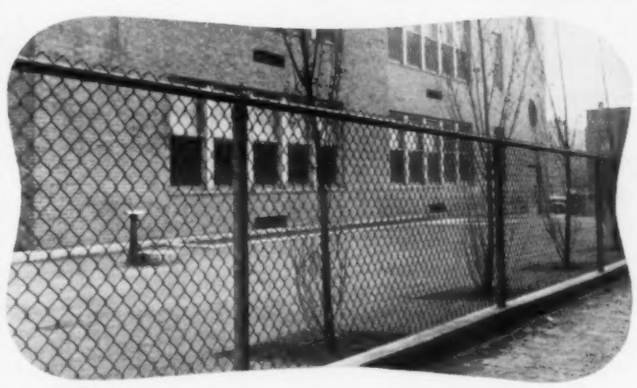

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literature at the University of Buffalo for a part of the current semester. His lectures will be delivered in both French and English.

Dr. William Harold Cowley, who last month was offered the presidency of the University of Minnesota, upon petition by the student body and faculty of Hamilton College, turned down the offer to remain as head of Hamilton College.

Dr. Harry Moorehouse Gage has been elected president of Lindenwood College, St. Charles, Mo., succeeding the late Dr. John Lincoln Roemer. Doctor Gage, who was the president of Coe College at Cedar Rapids, Iowa, assumed his duties at Lindenwood on March 1.

C. J. Thayer, elected principal of the Winthrop Senior High School, Boston, in March 1939, has resigned to accept a post at Louisiana State University as instructor of secondary education in the Teachers' College and supervisor of mathematics in the laboratory school.

Dr. Nelson P. Mead has resigned as acting president of the College of the City of New York and Dr. Harry N. Wright, director of the institution's evening and summer sessions, has been named to the post.

Dr. Robert T. L. Liston was inaugurated recently as president of Davis-Elkins College, Elkins, W. Va. Doctor Liston came from Southwestern University, Memphis, Tenn., last fall to be the sixth head of Davis-Elkins.

Deaths

Theodore P. Smith, principal of the Columbia Boro High School, Columbia, Pa., died recently following a week's illness.

J. W. Rogers, 54, principal of El Dorado High School, El Dorado, Ark., died recently following an appendectomy.

Travis Gibson, 41, high school principal, Jacksboro, Tenn., died recently of a heart attack.

Dr. Frank C. Jordan, director of Allegheny Observatory and a professor at the University of Pittsburgh, and Mrs. Jordan were burned to death in their home at Pittsburgh on February 15 in a fire which was started by a gas explosion. Doctor and Mrs. Jordan were overcome by smoke before they could leave the house. Doctor Jordan, who was 75, was a world-renowned scientist, especially well known among astronomers for his work in photometry, or the measurement of light, and for his spectroscopic observations.

Edwin G. Grafton, 59, supervising principal of San Jacinto and Stephen F. Austin elementary schools, Dallas, Tex., died following a brief illness.

Irving R. Gladstone, high school principal, Addison, N. Y., died recently of a coronary occlusion.

P. A. Jones, principal of the Sharon High School, Sharon, Pa., died recently from a heart attack.

John Stapp Mitchell, 52, principal of the University of Kentucky Training School since 1930, died recently at Lexington, Ky.

Howard B. Lathrop, 62, vice principal of the San Jose High School, San Jose, Calif., died suddenly of a heart attack.

Clarence E. Furst, 54 years old, superintendent of Wilson School, Easton, Pa., for eleven years and supervising principal for two years, died at his home following a stroke of apoplexy.

Dr. David Shaw Duncan, chancellor of the University of Denver, died suddenly from a heart attack on March 7. He had been with the university since 1906 and had served as its chancellor since 1934. He was to have retired at the end of this school year. His successor already had been chosen, Caleb Frank Gates, assistant dean at Princeton University, who was on his way to Denver when Chancellor Duncan died.

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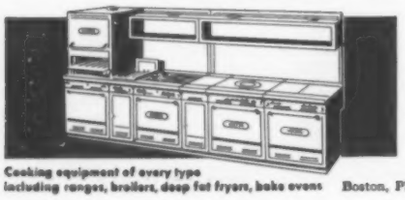

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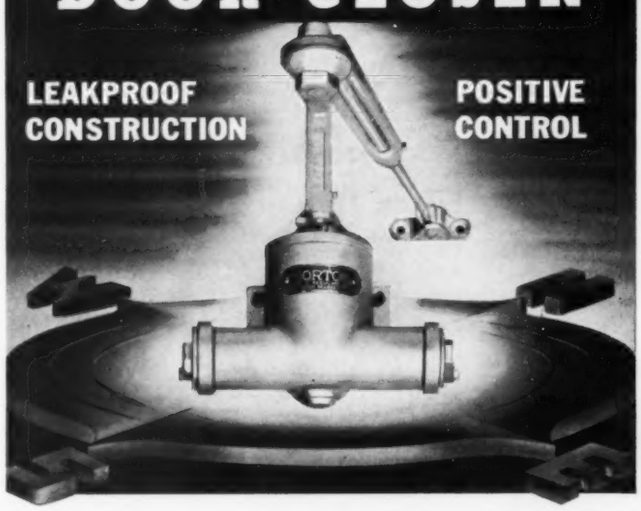

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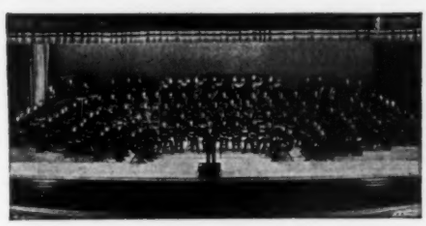

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ONE HUNDRED NON-ROYALTY ONE-ACT PLAYS. *Compiled by William Kozlenko. New York: Greenberg,* 1940. *Pp.* 802. $3.75.

OUR FORESTS. *By David Cushman Coyle. Washington: National Home Library Foundation. Pp.* 150. $0.25.

PRAGMATISM AND PEDAGOGY. *By Thomas H. Briggs. New York: The Macmillan Company,* 1940. *Pp.* 124. $1.25.

A SCHOOL IN THE COUNTRY. *By Chalmer Richardson. New York: Greenberg,* 1940. *Pp.* 250. $2.

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SAFETY IN THE WORLD TODAY. *By Herbert J. Stack, Don C. Seaton and Florence S. Hyde. Chicago: Beckley-Cardy Company,* 1941. *Pp.* 372. $1.20.

CONSERVATION OF AMERICAN RESOURCES. *By Charles N. Elliott. Atlanta, Ga.: Turner E. Smith & Company,* 1940. *Pp.* xi+672. $1.80.

THE COORDINATION OF SCHOOL AND COMMUNITY. *Twenty-Seventh Annual Schoolmen's Week Proceedings. University of Pennsylvania, Philadelphia,* 1940. *Pp.* vi+507. $1.

MATHEMATICS INSTRUCTION IN THE UNIVERSITY HIGH SCHOOL. *By Members of University High School Mathematics Department. Chicago: University of Chicago,* 1940. *Pp.* xiii+184. $1.

REVISION OF THE SEASHORE MEASURES OF MUSICAL TALENT. *By Joseph G. Saetveit, Don Lewis and Carl E. Seashore. Iowa City, Iowa: University of Iowa Press,* 1940. *Pp.* 62. *(Paper Cover.)*

SUPERIOR AND BACKWARD CHILDREN IN PUBLIC SCHOOLS. *By Arthur Paul Gossard. Chicago: University of Chicago Press. Pp.* v+172. $2.

TEACHING OF HISTORY IN ELEMENTARY AND SECONDARY SCHOOLS WITH APPLICATIONS TO ALLIED STUDIES. *By Henry Johnson. New York: The Macmillan Company,* 1940. *Pp.* xv+467.

MODERN TECHNIQUES FOR IMPROVING SECONDARY SCHOOL ENGLISH. *Edited by Harold A. Clarke and Mary P. Eaton. New York: Noble and Noble, Publishers, Inc.,* 1940. Pp. xiii+326. $2.50.

Textual

DUNLAP ACADEMIC PREFERENCE BLANK. *By Jack W. Dunlap. Form A or Form B.* $0.90 *per package. Specimen set,* $0.20, *postpaid. Yonkers, N. Y.: World Book Company,* 1940.

KNISS WORLD HISTORY TEST. *By F. Roscoe Kniss. Yonkers, N. Y.: World Book Company,* 1940. $1.30 *per pkg. of* 25. *Specimen set,* $0.20.

A STUDY-BOOK FOR EVERYDAY PROBLEMS IN SCIENCE. *By W. L. Beauchamp, J. C. Mayfield and J. Y. West. Chicago: Scott, Foresman and Company,* 1940. *Pp.* vi+346. $0.84.

A COURSE OF STUDY FOR THE UNITED STATES CONSTITUTION. *By Wesley D. Kirby. Phoenix, Ariz.: O. B. Marston Supply Company. Pp.* 50 *(Paper Cover).*

TEACHER LIABILITY FOR PUPIL INJURIES. *Washington, D. C.: National Education Association,* 1940. *Pp.* 24. $0.25 *(Paper Cover).*

MY DOG LUCKY. *By W. F. and Helen Hall. Chicago: Beckley-Cardy Company,* 1940. *Pp.* 189. $0.80.

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Trade News

Averting Uncertain Deliveries

Anticipating possible delivery delays and price increases in school bus equipment later this year because of priority orders for defense equipment, J. H. Shields, executive vice president of Superior Body Company, Lima, Ohio, manufacturers of school bus bodies, has outlined steps that his company has taken to avert this situation. Mr. Shields said that his firm placed unusually large orders for steel and other vital materials as early as last summer and that special warehouses have been engaged to store this material as rapidly as it is delivered. Arrival of chassis from automobile plants, usually concurrent with the spring and summer production of bodies, already has started at the firm's plant at Lima. Delivery of 1941 school bus demonstration units to distributors commenced in February and was completed late in March, as contrasted to former years, when the industry provided distributors with new demonstrators during May and June.

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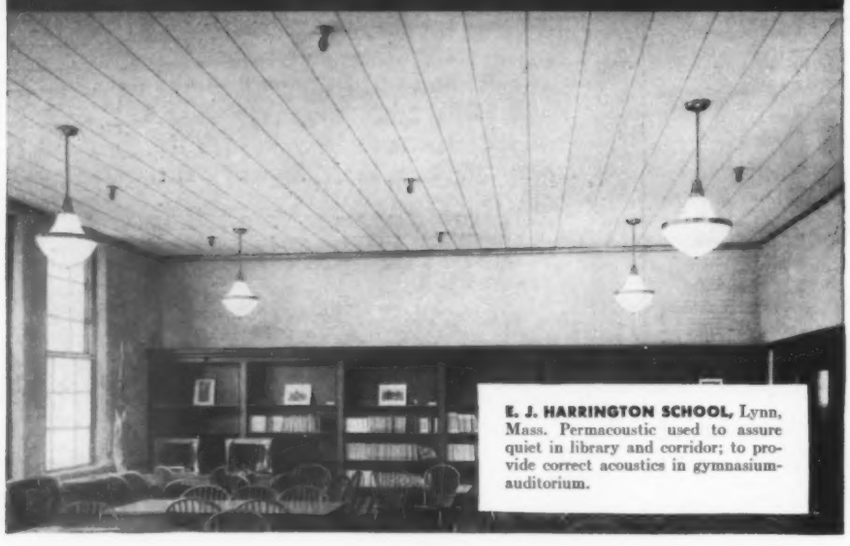

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When you are planning new locker installations, consult the engineering service provided by Lyon Metal Products, Inc., Aurora, Ill., which is provided without any obligation to you. The locker catalog No. 233 gives complete details.

Reduced Cost With Stokers

How public institutions have reduced the cost of producing steam with Detroit RotoStokers is explained in a series of catalogs showing installations in various schools and colleges issued by Detroit Stoker Company, General Motors Building, Detroit.

Noiseless Vacuum Cleaner

A new noiseless portable vacuum cleaner, known as the Tornado Noiseless Model 230, has just been announced by the Breuer Electric Manufacturing Company, 5100 North Ravenswood Avenue, Chicago. The motor and fan noise has been reduced to a negligible factor, making it possible to arrange cleaning schedules even when the occupants are in the building. Only the sound of the air rushing through the nozzle and cleaning tools is audible a few feet away. The machine weighs only 50 pounds so that it can be easily rolled about on its large casters or picked up and carried.

New Type of Inkwell

The Squires Inkwell Company of Pittsburgh has announced a new Common Sense Inkwell in the popular 1¾ inch size. The new inkwell has a bakelite screw cap, which is easily unscrewed, prevents evaporation, is practically unbreakable and is noncorrosive.

A Tool for Speech Training

Every time we speak we hear our own voices but not as others hear us. The speaker can hear his own voice as it actually sounds to others only when it is faithfuly reproduced for him by some instrument while he is silent. To meet this need in voice instruction a new device, the Mirrophone, has been developed by Bell Telephone laboratories research and Western Electric manufacture.

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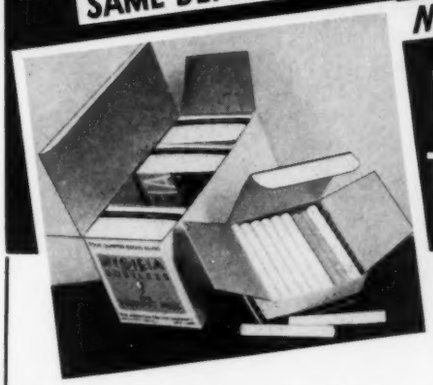

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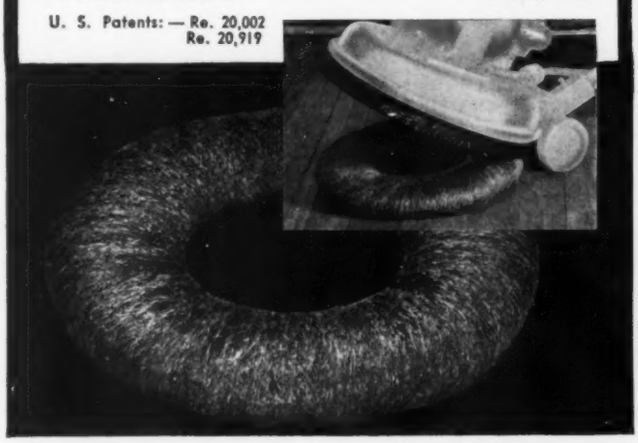

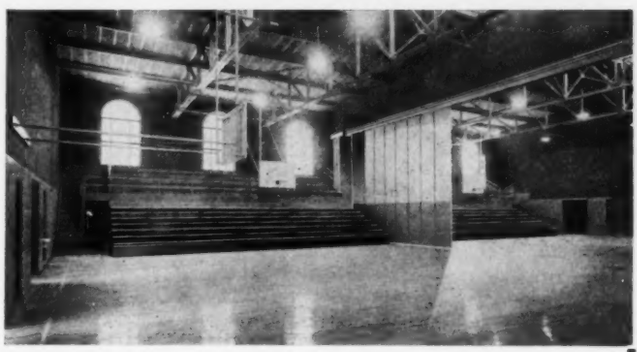

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New school and institutional model sewing machines manufactured by the White Sewing Machine Company, Main and Elm Streets, Cleveland, are designed to meet the requirements of home economics departments. Features are: forward and reverse stitching, dial tension control, automatic bobbin winder release, tubular steel construction and sight-saving sew light. The machines are available in both foot treadle and electric drive models.

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Side Glances—

SCHOOL decoration is a fairly recent development and The NATION'S SCHOOLS has been its chief proponent in the publishing field. To the literature already presented in our pages will come a substantial addition, a 16 page portfolio on General Furnishings, with special mention of teachers' lounges, kindergartens, home-making suites, the library and a cafeteria. Watch for it next month.

"IN THE interests of defense"—Don't be misled by that timely caption into supporting legislation that will give the federal government greater influence in education, warns George M. Wiley, associate commissioner of the New York State Department of Education, who in next month's issue will attack the bill, H.R.1074, along with other evidences of extending federal control.

IN JUNE Arch O. Heck of Ohio State begins a thoughtful series on pupil personnel work and Charles L. Worth concludes his discussion of personality difficulties, begun on page 53 of this issue.

YOU will wish it were your school board when you read next month of the job of social interpretation done by President Kohler and his fellow trustees at Glencoe, Ill. There is an idea here for every school administrator in the country but, first of all, he must educate the board of education.

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Edwin H. Reeder, *University of Illinois*
Stanley H. Rolfe, *Newark Public Schools*
F. R. Scherer, *Rochester (N. Y.) Public Schools*
H. W. Schmidt, *Wisconsin State Department*
R. E. Scott, *Hennepin County (Minn.) Schools*
J. W. Studebaker, *Commissioner of Education*
Willis A. Sutton, *Atlanta Public Schools*
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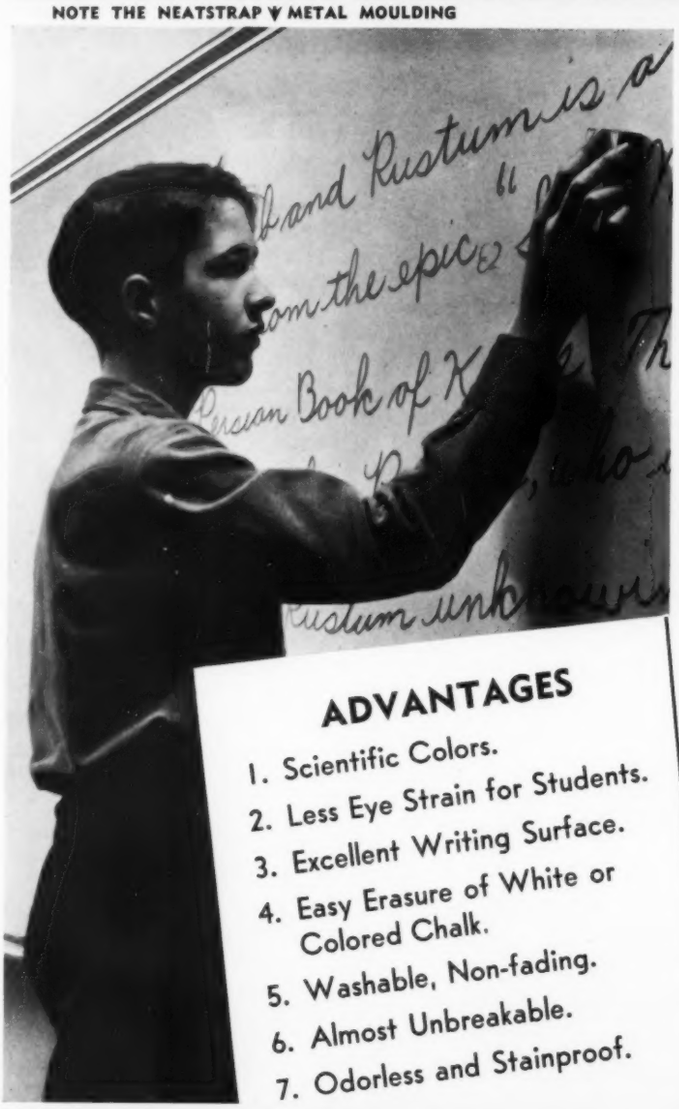

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BETTER PLANT PRACTICES

Buying for Next Year

That orders for school supplies and equipment should be anticipated and placed well in advance seems to be the feeling of many school business officials. To those opinions already expressed last month is added further comment by F. P. Rogers, purchasing agent, board of education, Jamestown, N. Y.

"We have decided to purchase certain items for next year's use," he tells us.

"It is our understanding," he adds, "that certain tools, such as micrometers and other machine shop tools, mechanical drawing instruments, paint brushes, sewing machine needles, Philippine mahogany and some lumber items will be among the items difficult to procure.

"We are informed that sewing machine needles, linen thread, paint brushes and mechanical drawing instruments are generally imported. A recent quotation on Philippine mahogany shows an increase of $20 per thousand feet because of an increase in water freight, transportation and insurance. Paint brushes, recently purchased, have advanced at least 25 per cent over purchases made last spring. Certain paper items have advanced. We have purchased machine tools, steel, iron, paint brushes, general shop tools and Philippine mahogany in sufficient quantities to take care of our needs for 1941-42."

Continuing as Heretofore

To continue for the time being as heretofore with a request for as prompt deliveries and as good qualities as is possible to get is the policy advocated by B. C. Rain, secretary-treasurer, board of school commissioners, Mobile, Ala.

"Most of our supplies have been coming in fairly promptly," Mr. Rain reports, "with the exception of certain items of hardware and tools. So far all items needed in operating our schools have been purchased locally and have been coming through without much delay. I believe that prices on certain articles of paper and tools will advance considerably before the next year's purchase."

Time Will Tell

Deliveries are slower than usual. This is the experience of H. C. Roberts, secretary and business agent, board of education, Independent School District, Sioux City, Iowa.

"In another month or two we can tell more about it," Mr. Roberts believes. "I presume we must anticipate our needs farther ahead and place orders well in advance of the time needed for use. It may also be expected that the range of styles, models and grades will

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narrow as the defense program expands and factories are called upon to furnish their regular products to the government in large quantities or to manufacture products now foreign to their present lines. Some changes in school specifications or substitutions may well be anticipated as necessary.

"Tools, machines and other steel products probably will become increasingly difficult to procure. While not noted here in Sioux City, I am informed of numerous delays in other places. The government will require such a wide range and variety of materials and such large quantities, that we may well expect difficulty and delay in a large proportion of the supplies we use.

"There are not many items on our supply list which cannot be obtained from domestic sources. The laboratory list may be hit the hardest as imports are curtailed. Some items of foreign manufacture now used can be replaced with domestic without difficulty. The price trend on paper and tools will undoubtedly be upward as it has been for the past several months. I was agreeably surprised, however, on a recent purchase of a carload of paper towels, to find prices quoted to us only from 1 to 5 per cent higher than a year ago. Lumber has already taken several substantial price increases."

Stagger System at Dearborn

At Dearborn, Mich., Carl F. Renneker explains that there are two groups of custodial workers at the Fordson public schools—men on salaries and women on part-time and hourly bases. "We do all janitorial work with these employes," he states. "We use the stagger system for vacations. They are started as soon as the spring term is out, with as many men going at a time as is possible but still leaving at least one man at each school.

"This takes care of all the vacations at the first of the summer and all employes are back to get the schools ready for the fall term. Our city recreation department has been using four of the swimming pools and all of the 11 schools in this district as recreation centers, which may mean additional janitorial service for which to plan.

"The janitresses are on an hourly basis and do not begin work until one week before school opens. Fortunately, during the depression, the janitress force was more than doubled so that more women could be employed. This gives them ten hours a week for cleaning four classrooms or its equivalent. They work one and a half hours a day, four days, and four hours on Friday. The janitor cleans the corridors and disposes of all the waste at the same time; this makes an efficient system because the dirt is not carried from the corridor to classroom and vice versa."

Keep Refrigerators Running

Better to leave mechanical refrigerators running during summer vacations, according to one school engineer. Cafeteria managers in this system are so advised, it being pointed out that the plan saves much trouble and expense and with the doors tightly closed the current consumption is negligible.

Annual Short Course

The third annual short course for school building service employes will take place at Teachers College, Columbia University, during the week of June 23 to 27. This course, which will consist of lectures, demonstrations, motion pictures and round table discussions, is open to all people who may be interested, particularly superintendents, supervisors, chief engineers, head custodians. A triple program will be carried on covering the broad subjects of housekeeping, engineering and general repairs. Twenty-five people who are experts in their individual fields will comprise the instructional staff.

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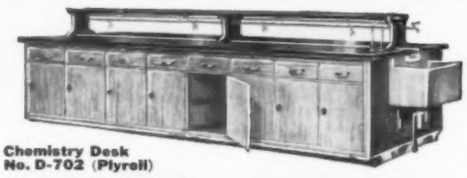

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LOOKING FORWARD

Incompetence!

DR. EMIL ALTMAN, former chief medical examiner for the New York City public schools, has written a significant article in the April issue of the *American Mercury* on the inability to discharge mentally unbalanced teachers under the New York tenure system.

Doctor Altman tells the story of what happened when his office recommended the discharge of some mentally incompetent teachers of whom there are a total of 4500 in the city schools! These teachers are still in the classroom and Doctor Altman has retired from service.

Conditions of this type in teaching are possible only because the organized teaching profession in New York and in some other states appears to be imbued with the idea that the first professional duty is to protect the teacher instead of the children. These conditions may prevail for some time but when the people are finally aroused to the dangers involved, they may not act gently with permanent tenure systems. The organized teaching profession has the responsibility of putting its own house in order or facing popular reactions that may have far-reaching results. Tenure can only be justified so long as efficient service is rendered to the children and the community.

Democracy Fights

THE adoption of the Lend-Lease Bill and its subsequent interpretation by the President in his Press Club speech of March 15 have clarified considerably the status of this nation in the present world struggle. If one thinks of the 1914 model of how to carry on war, this country is not yet at war. If being at war is translated into current streamlined terminology as "all-out aid," it is obvious that we are in the midst of a second world-wide struggle.

In this struggle to the finish between aggressive totalitarianism and democracy, our rôle will gradually change. The United States will progressively share a larger part of the financial burden and of responsibility for procurement. The United States has made its choice. There is no possibility of withdrawal or appeasement. Democracy must win! In general, this change in condition will not cause any extended change in the program of the day schools. Adult education already has undergone many changes, particularly in vocational training. Money may be harder to secure, economic position more difficult to maintain and greater effort required of those who man the schools.

The teaching profession will find itself confronted by greater pressures as the struggle becomes more intense. There will be increasing criticism of the schools and greater efforts to bend them to special uses. The teaching profession must stand firm—in close relation to the parents of children to safeguard the total educational birthright of children and youth in the public schools.

This grim world struggle can be maintained without sacrificing democratic values. The schools must continue to teach tolerance and not hatred. Children of minority racial groups must be protected against discrimination. Special teaching may be desirable to improve both child and adult morale. As the nation becomes the "arsenal of democracy," the schools must maintain their essential position as laboratories for developing democratic competence.

Inform the People

AMONG the many communications that our February editorial on the Schwert physical education bill elicited from physical educators and health specialists in the schools were several that asked what physical educators might do to improve physical education within our school districts.

It always has seemed to us that special subject matter or activity interest groups within the organized teaching profession followed a conventional and dubious pattern. The history of many of these groups has been as follows: organization, selection of a professional secretary, immediate efforts by the secretary to justify himself, development of a program to secure state or federal aid for the always undermanned and thwarted curricular segments affected, the development of pressure technics centered on state or federal support, then aggressive campaigns for more members on the basis of the "program." A typical high pressure procedural pattern!

These groups could make a more worth-while contribution to the improvement of instruction if a different and less showy policy were adopted. The first constructive step would be determining need through

objective analysis of reported information or through field survey.

Upon the basis of the foregoing information a program of need could be developed. This need could then be publicized nationally, within states, and locally through articles and speeches. Information could be furnished to community districts and an intelligent supporting public opinion gradually developed within the community. This public opinion would ultimately force consideration and progressive satisfaction of need within the local budget.

The recommended program is one of interpretative education in the adult field and the slow but certain growth of a feeling of need by the total community. The real responsibility of an organized professional interest group is the creation of appreciation and understanding, the basis of all sound democratic progress. Under this pattern there would be little need for the establishment of expensive lobbies at state and national capitals. It may take longer but the ultimate results will be better.

Study in Waste

PLANS now projected for huge appropriations for special N.Y.A. work schools independent of community public school systems should be examined critically by members of the Congress. There is no need for these narrow vocational schools in the American pattern. The money so appropriated might be more efficiently used if dispensed through the state education authority for the improvement and extension of the regular public schools. The need of the public schools for federal aid for the purpose of plant extension and improvement is imperative. The attempt on the part of the National Youth Administration to build a parallel system of schools represents a beautiful study in social waste, at a time when community and state resources are strained to provide adequate housing for the public schools. There is absolutely no need for a dual system of public education in this country.

The School's Job

THE current emergency demands some clear thinking and aggressive action by the teaching profession so that the public schools may serve democracy to the limits of their possibilities. The specific job of the public school may be divided into programs for the adult and programs for the children and youth. In the past few months the national educational publicity that has been released has confused the two problems in the popular mind.

The responsibility of secondary schools, colleges and universities is to provide adults with refresher courses in vocational skills, to furnish opportunity for free and objective discussion of the issues confronting the nation, to strengthen adult morale and to provide opportunities for physical, emotional and mental recreation through physical education, play and fine arts programs.

The responsibility of the school in the case of children and youth is somewhat different. In the September issue of The NATION'S SCHOOLS we stated that "the school's primary work is the development of individuals who are competent to operate democratically and who believe so completely in democratic values and methods that they will be willing to make great sacrifice to maintain them. . . . The high emotional state and condition produced by emergencies express themselves in terms of immediate objectives and needs."

Since the opening of school last fall, educational leaders have begun to take stock of the total situation in which public education finds itself and they are speaking out strongly against efforts on the part of certain organized professional interest groups to use the emergency to advance their own personal and group interests. We speak of the vocationalists and physical educationists.

Dr. Frederick H. Bair, superintendent, Bronxville, N. Y., states that: "I am just as much concerned as anyone that the United States shall be prepared to defend itself in a military way, but I do not believe that it is, in any really important degree, the business of the schools. . . . The patient, slow, fundamental, in-forming work of education needs now to be prosecuted with all that we can summon of insight and courage. . . . The job of the soldier and that of the educator are two different aspects of defense; the soldier fights to rectify blunders already made; the educator teaches to minimize the likelihood of their repetition. . . . Our first contribution to defense is to believe in what we are doing. . . . Ours is a hundred year crop.

"The teaching that is going to win this war, if we have to fight, already has been done. In my judgment it has been well done. . . . It is not too much to say that the destiny of man is in some sort the prize of a race between contrasting conceptions of education and that America is preeminently the exemplar of the liberal and liberating schools!"

To accomplish the objectives that Doctor Bair so forcefully advocates demands a balanced program with proportional emphasis upon all aspects of learning. There must be no distortions through misdirected emphasis on either physical or vocational training.

Supt. Ben G. Graham of Pittsburgh considers the chief job of the school in national defense to be teaching for democratic competence.

Superintendent Graham believes that: "The most important contribution which public education can make to our national defense is not training men

for industry, important as that is, but is building the morale of our young citizens. When democracy is threatened, the thing that supports and sustains our people is the faith in a democratic way of life and the spirit of the people which unites them solidly behind the political, military and economic measures necessary for our protection and the continuance of our way of life.

"No better examples could possibly be found in modern history than the defeat of France and the success of England to date, each brought about by the spirit of their people. The spirit of national unity, which is the expression of our morale, is determined largely by our emotions and a dynamic patriotism inspired by a love for American ideals."

The time is ripe for rational evaluation of the problems of defense and of the schools. The teaching profession must stand firm in preventing the public school from being handicapped in the exercise of its true function.

Instructional Balance

THE purpose of the public schools is to train for individual and social efficiency (citizenship) to permit adaptation to harmonious living within our culture. The oustanding characteristics of our democratic way of life are idealism, individual participation, fair play, classlessness, opportunity, change by evolutionary methods, tolerance for other people and for different points of view. The qualities essential for intelligent participation in our democracy include mental and emotional stability, physical endurance, open mindedness, sound judgment, ability to cooperate with others, moral courage, reverence and audacity or the capacity for and desire to explore the unknown, to advance the frontiers of knowledge and to blaze new trails.

These purposes are best promoted when home, school and community unite to provide adequate opportunities for youth in the school and within the total community life. No single agency is completely competent to do the total job! These qualities cannot be produced by overemphasis of one phase of learning to the detriment of others. While it is necessary to train for physical endurance, our schools must not make the same mistakes as ancient Sparta and its totalitarian imitators. Mechanical and physical competence is of little value in a democracy unless supplemented by strong character and social conscience.

The instructional program above all demands rational balance between physical training, vocational education, the languages, the social studies, the exact sciences and the fine arts. None of these curricular subdivisions should be elevated at the expense of others. All are equal contributors. In the long run misdirected emphasis will be socially expensive.

The great current danger is that the emotions engendered by the national defense program will enable professional interest groups to produce undue emphasis on physical training and vocational education to the neglect of the other immediately less dramatic essentials.

There is even grave danger that the classless concept and the open ladder of educational opportunity will be decreased by the development of separate and narrow trade schools under state or community control and of even narrower vocational schools under the direct control of the federal government. Regardless of threat of war or even war itself, the children's total educational opportunity must be kept intact so that democracy may survive. The best assurance of open opportunity is to maintain community control of the instructional program. The state education authority may lead, advise and suggest but should not dominate community schools. Only the continued watchfulness of the people over their community schools can prevent fundamental changes during the current emergency that may affect profoundly the future of their children.

Championships

THE strong stand taken by the Michigan Conference of Superintendents on championships deserves wide publicity and serious consideration by thoughtful educators in the other 47 states. After several years of study of the educational value and the effect of state championship contests on the educational program and on the individual, the Michigan superintendents came to the conclusion that certain reforms were desirable.

The championship cult in public education is not confined to athletics as laymen generally believe but is also evident in the fields of debate and oratory, school publications, hobbies, music, spelling and other aspects of the instructional program. These contests have been inspired and sponsored by newspapers, institutions of advanced learning and special interest groups, as well as by educators. Normal contests within schools and between schools in naturally related areas have their value. However, when these normal child and youth competitions are whipped into an abnormal community position through distorted publicity and emphasis on competitive instead of instructional values, when teachers bend their efforts, because of rewards and job implications, to develop a winner to the neglect of teaching the group, then it is time to take action that will stop the exploitation of children and teachers.

The Editor

Creative Learning

FRANCES BROWN CHASE

THE accompanying illustrations are indicative of work exhibits done in connection with English courses in grades 10 and 11 of Cass Technical High School, Detroit.

The exhibits were on display in school corridor cabinets for consecutive two week periods at intervals during the school year of 1939-40. They were viewed by hundreds of pupils, teachers, parents and laborers about the building. Much favorable comment relative to their educational value as a finished product was received from all groups. I was more concerned with the learning values that led to improved behavior than with the information the material imparted.

Goals were set up and stimulation was directed toward the urge to excel, the desire to succeed, the wish to do the expected thing, the desire to conform to the group and the acquisition of mechanisms for such ends. The end result was an exhibit. Worth-while activities in reading, writing, speaking and listening to the English language were the learning values on which the pupils' progress was rated. The displays involved topics assigned in various units in the course of study.

Although no scientific study of achievement was made, these activity groups compared favorably with other classes on the departmental tests. In addition, the activity groups had demonstrated strong character building traits, such as ambition, responsibility, service, cooperation and reliability.

The results of these group activities aroused energizing forces in other persons who viewed the exhibits.

As the units of study were begun, recognition of the various talents represented in the room was offered. Pupils were assured that any creative expression on their part would have full value in credit. They were also assured that they would have the chance to take the traditional tests as well. Activity was entirely voluntary, yet no class refused the opportunity of preparing an exhibit.

In every class enthusiasm soon ran high, carried along usually by those pupils who are ever wanting to do something. Committees were appointed to take care of the arrangements in all detail, the date of display was set and from the moment of initial stimulation little class time was given to the exhibit in progress. The work involved represented extra home work exclusively, during evenings, week ends and va-

Cass Camera Club

Showing Certain Interpretations of the "Idylls of the King"

A collection of voluntary free hand drawings and paintings in various mediums. Most of these pictures were made at home during vacation, Spring 1940.

The floor base of the exhibit protrayed many marked passages which showed that the poem taught many character traits. Placards were made and placed similar to the following design:

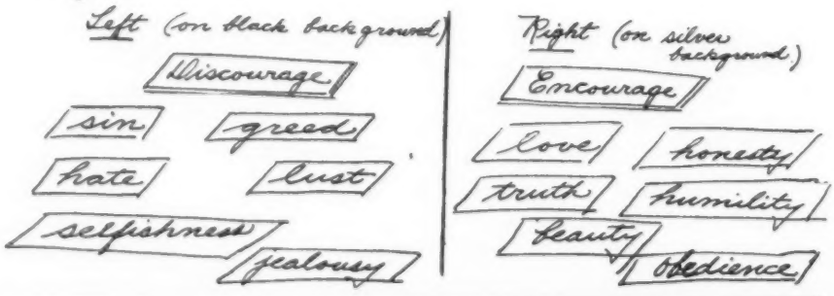


Fig. 1—English exhibit centered around the theme of "Idylls of the King."

From Exhibits

English Instructor, Cass Technical High School, Detroit

cations. Parents reported that much leisure time became purposeful and enjoyable.

The Benjamin Franklin Exhibit, portrayed in figure 2, is the result of the work not only of the committee on arrangement but of two other committees. One committee visited the Burton Historical Museum in search of material and one made a trip to a local department store.

From the museum two copper plaques of the bust of Franklin were obtained, a section of the original lightning rod that Franklin had placed on old St. Paul's Cathedral in London and several photographs pertaining to the life of Franklin. The committee reported interesting experiences in the museum, which stimulated other members of the class to go to this not too well frequented place. A department store lent the committee a doll dressed in historical costume and several new copies of the "Autobiography of Benjamin Franklin" by Van Doren.

Courtesy cards naming the donors were displayed near the articles. "Thank you" letters were mailed to the contributors, including a write-up of the use to which their material was put. A feature article was written for the school paper. No general assignments were made for this work. There was no compulsion. Suggestions regarding the need for courtesy cards, letters and copy for the paper came sometimes from the teacher and sometimes from the pupils. Invariably, a greater amount of material was produced than could be used. Credit was given for effort whether the results were used or not. The best copy was put on display and the remainder was judged according to merit and kept on file in notebooks.

The originals of the slides mentioned in figure 2 were pen sketches based on the life of Franklin. One member of the group took the many sketches handed in and traced them on glass slides to be used with the stereopticon. Pupils prepared talks pertaining to their sketches, which they delivered when a moving picture show with pupil-made slides was presented. One pupil proposed the making of a set of slides that would explain all the operations necessary in making them. He did this and wrote a good speech to accompany their showing. Pupils learned to read, write, speak and listen to the language of Franklin through the desire to stage a motion picture.

In like manner many activities have developed into exhibits and each has given rise to learning situations pleasurable to observe. A friendly, cooperative spirit predominates. Fears of test results abate as units near completion. In due time even the least studious individuals bestir themselves to create something —art work, printed material, writing or speaking.

Reading, writing, speaking and listening to the English language in progressive, purposeful units are the objective skills that it is our job to master. Better men and women are the characters we hope to help create.

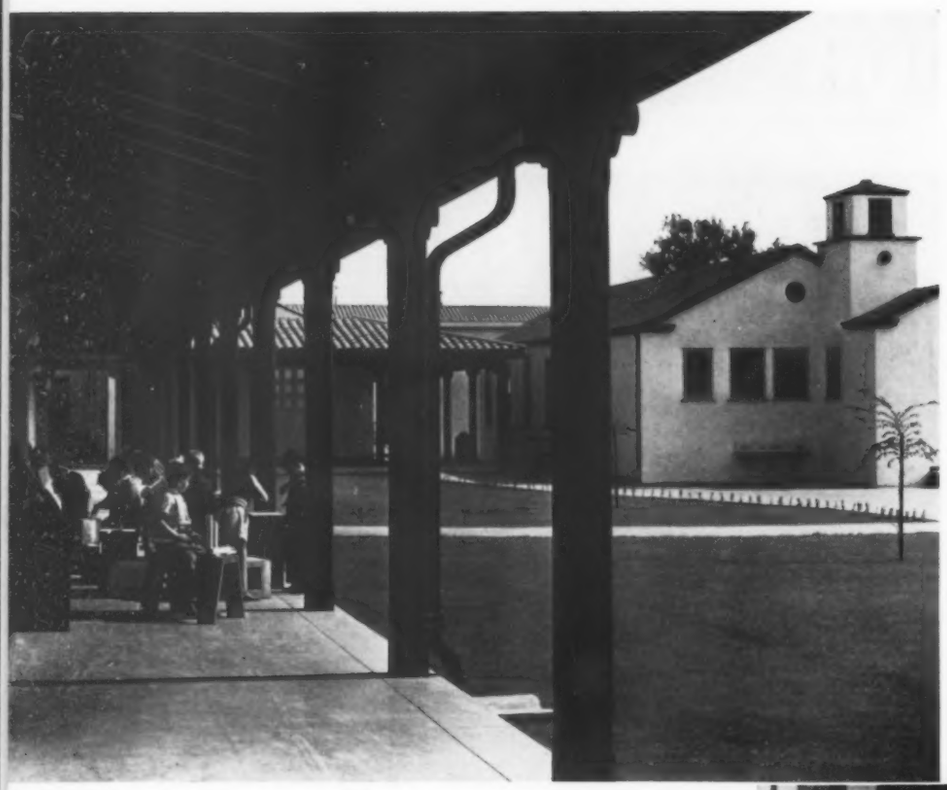
Cass Camera Club

"Benjamin Franklin" Exhibit

Pictures from homes, libraries, and classrooms.
Plaques and other material from Historical Museum.
Loan of doll, dressed in historical costume of the time, from local department store.
Slides, and originals of slides, made by students for a "picture show."
Write-ups of the speeches given relative to each picture as the slides were shown before the entire class.

Fig. 2—The originals of the slides mentioned above were pen sketches based on the life of Franklin. One member of the group took the many sketches handed in and traced them on glass slides to be used with the stereopticon. Pupils prepared talks pertaining to their sketches, which they delivered when a moving picture show with pupil-made slides was presented by the class.

Primary



WEST Whittier, a small rural school district in Los Angeles County, California, has just completed a primary unit, consisting of a large kindergarten room, two classrooms and washroom facilities suitable for little children. This unit is joined to the main building by an outdoor corridor on to which each room opens. This corridor is 8 feet

Left: The outdoor corridor, 8 feet wide, which joins the kindergarten to the main building and which is used for construction or play activities. Below: A closeup of some of the construction work being carried on by young pupils outside of the classroom area.

CONSTRUCTION DATA

STRUCTURE: Foundations, reenforced concrete. Superstructure, wood frame. Cement plaster exterior walls and gypsum plaster over wood frame on interior walls.

ROOF: Fifteen year composition roof.

WINDOWS: Wood window sash, projected type with universal window hardware.

FLOORS: Asphalt tile applied over cement finish floors. Toilet rooms, cement floors and tile wainscot.

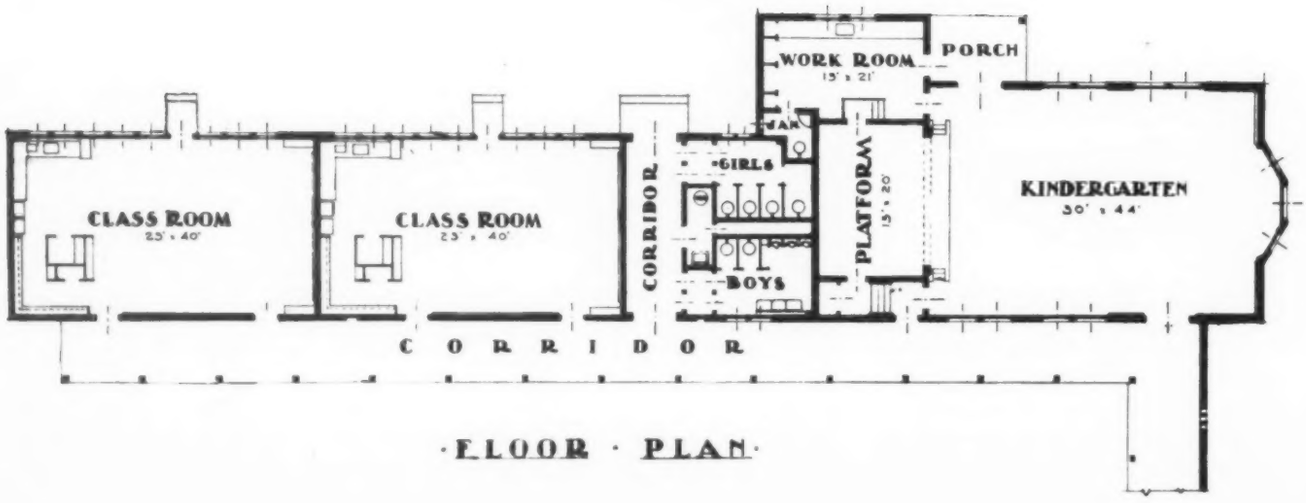
WALLS: Interior walls, stucco in classrooms and smooth plaster coat, painted, in all other rooms.

CEILINGS: Classrooms and kindergarten, acoustical tile.

PLUMBING: Modern plumbing with chromium plated trim. Toilets, floor type with flush valves. Work sinks in classrooms equipped with drinking fountains or bubblers.

HEATING: Thermostatically controlled warm air circulator units in all of the rooms.

LIGHTING: Fixtures are of the semi-indirect type with plastic bowls.



FLOOR · PLAN

Unit for Rural School

IRENE B. WHITCOMB
District Superintendent, West Whittier School District, Whittier, Calif.

wide, permitting construction or play activities.

The classrooms are 23 by 40 feet and each has a work corner. This includes a sink with running water, a drinking fountain and a tile drainboard at a suitable height for primary children. In one end of the drainboard, a porcelain bin with heavy metal top serves as a receptacle for clay. Beneath the drainboard are several drawers, one of which is metal lined to care for paint and calcimine. Large bins on casters, which slide back under the drainboard, are used for storing blocks.

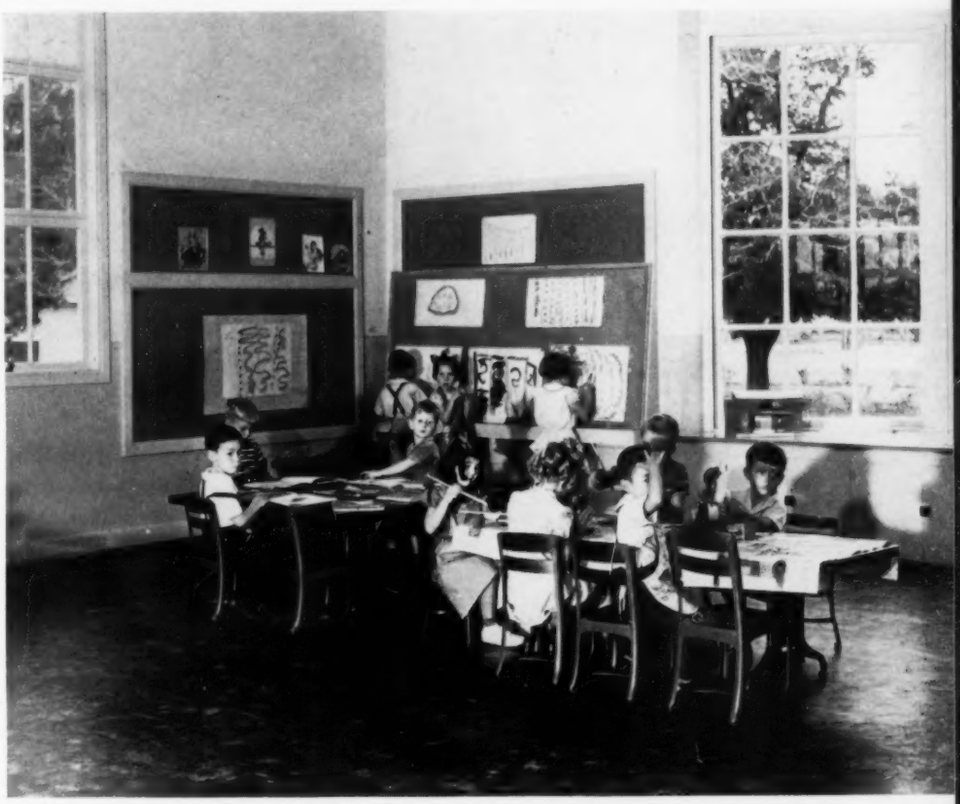
At right angles to the sink is the work bench, fitted with a vise. Just beyond are large racks for tools. These racks are on casters so that they may be moved to any part of the room or outdoors if construction activities are being carried on there.

In the opposite corner of the room is a large cupboard, the front of which consists of shelves for books and art or flower arrangements. Behind are a group of compartments for the use of the children and a rail for their coat hangers. Three other large cupboards furnish additional room for materials, books and other supplies.

To assure adequate space for creative art expression, tackboard, set at an angle, has been installed along one entire side of each classroom and between the windows in the kindergarten room. In place of a chalk tray, a metal tray holds jars for calcimine and brushes. More children are able to paint at one time and floor space previously required for easels is saved.

Blackboards have been placed on one side of the room only and these have large areas of tackboard above and on each side where the work of the children may be displayed. Furniture is movable.

On one side of each room a door leads to the playground. Separated by a hedge from the rest of the yard, a large plot of ground has been laid out and equipped for the use of primary children only. Here, too, are the garden plots and pens where pets may be cared for.

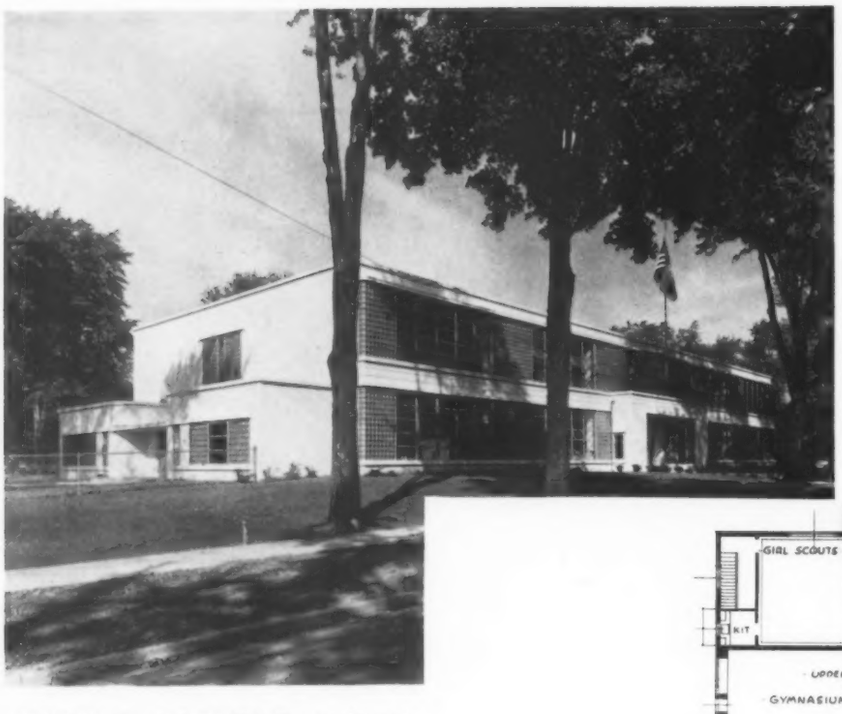


Above: Tackboard, set at an angle, has been installed along one entire side of each classroom and between the windows in the kindergarten room. A metal tray holds jars for calcimine and brushes. Below: Work corner with sink and built-in storage.

Farragut School
Bay City, Mich.

BENJAMIN KLAGER, Superintendent

THE need for a new building to replace the 70 year old Farragut School had been apparent to the citizens of Bay City, Mich., for many years and the necessity for giving the project early consideration was further emphasized through the findings of the survey, "School Plant Needs of Bay City." The building was completed in October 1939.



JOSEPH C. GODDEYNE, Architect

Facts About the Building

1. The volume of the building is 436,000 cubic feet. Figuring the cost of this type of construction at 35 cents per cubic foot, this building is valued at $152,600.

2. The building is of modern fireproof construction with exterior of monolithic concrete and glass brick.

3. The heating, lighting, temperature control, ventilation, plumbing and electrical equipment are modern in every respect.

4. All classrooms and corridors are treated with acoustical material.

5. The building is equipped with a central electric clock system and radio system with individual units in each room.

6. The auditorium-gymnasium is 60 by 40 feet and has a seating capacity of 400.

7. The building contains 12 classrooms, a library, one unassigned room and several auxiliary rooms. It will accommodate 450 children.

8. The classrooms are equipped throughout with new movable furniture.

9. Classrooms also are equipped with steel storage cabinets and wardrobes. Corridor lockers are provided for older children.

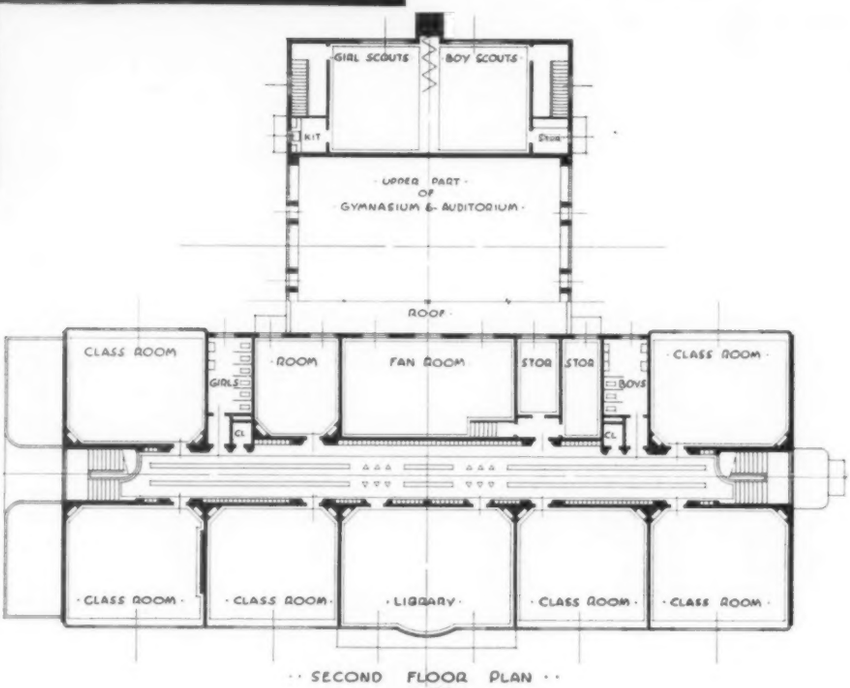
10. Chalkboards are made of glass; adequate exhibit space has been provided.

11. Special rooms and facilities have been provided so that the building can be used extensively for community purposes.

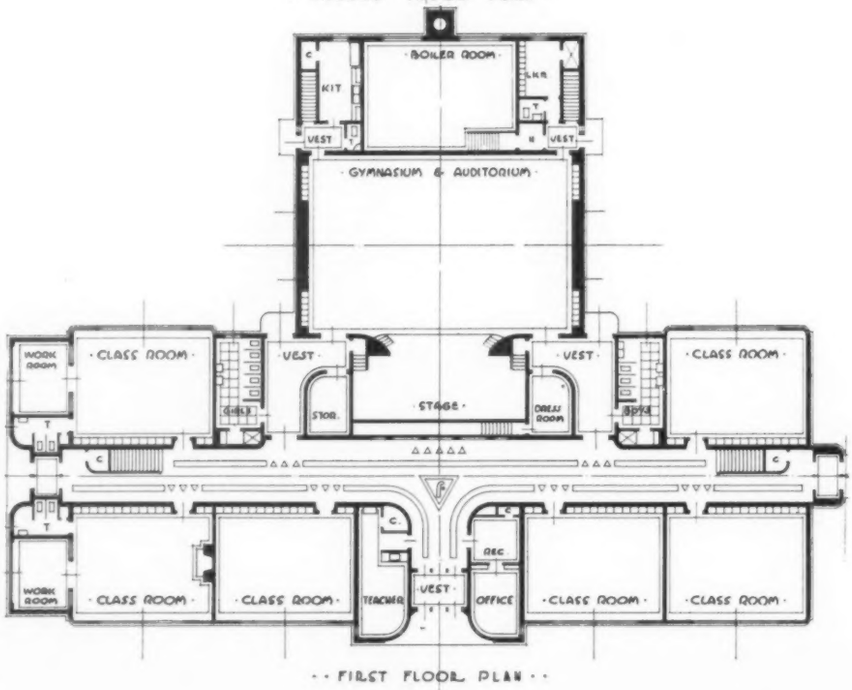
12. The play area is protected by an ornamental fence. The playground is treated with a fine grade of crushed stone and the site has been landscaped.

13. Provision has been made for separate play courts for boys and girls with special consideration for the children of the primary grades.

14. The total cost of the project to the Bay City school district was $104,000. This included removing the old building, erecting the new building, providing new equipment, improving the site and the architects' fees. The W.P.A. provided $88,000.



SECOND FLOOR PLAN



FIRST FLOOR PLAN

The Schoolmaster's Wife—

An Administrator Without Portfolio

KENNETH C. COULTER

Supervising Principal, Jamesburg, N. J.

WHENEVER and wherever schoolmen gather there is a pronounced emphasis on the personal pronoun "I," coupled with the simple little word "do." From that simple beginning many dissertations are given about "my" school. Far be it from me to view with alarm this harmless habit of inflating the ego. My concern is with the fact that the "I" should be changed to "we," denoting not only the schoolmaster but also the schoolmaster's wife.

The inclusive "we" does not indicate that the schoolmaster's wife guides the destinies of the school. I only insist that the really competent wife of the schoolmaster makes it possible, many times, for the man to make the decisions that he does make.

Who is and what is this important but unseen influence in American education? What are the qualifications of the schoolmaster's wife?

In the first place, Mrs. Schoolmaster must have a pleasing personality. She should be able to meet people easily and have sufficient force so that she is not too quickly forgotten. This pleasing personality should be built upon a sincere interest in people and in what they do. Mrs. S does not need to be beautiful; indeed, great beauty of person might prove a handicap, but she must be likeable.

She Must Be a "Joiner"

A second asset that Mrs. S should have or should develop is that of being a good "joiner." Especially is this true in the smaller communities in which most schoolmasters are located. The P.-T.A., the ladies' aid, the little theater group, the book club, the bridge clubs, the young women's league, possibly the W.C.T.U.—all these and perhaps others want to have Mrs. Schoolmaster on their membership list.

In these groups Mrs. S should not be a nonentity. She should be able to take care of her part of the leadership and present her share of the ideas that are needed to keep these groups on the move. One thing more: in these groups Mrs. S must never gossip; on the other hand, she may, by her presence in the group, call a halt to vicious stories concerning the schools or the personnel of the schools.

A third requirement for Mrs. S is that she be "All things to all people." She must seem well educated and well versed in the finer arts to the wife of the town's leading lawyer; she must be able to discuss the problems presented by the younger generation with the minister's wife. On the other hand, she must never give the impression of being snobbish when talking to that woman who, through no fault of her own, attended school only through the fifth grade and is self-conscious about the fact. Needless to say, Mrs. S must be truly democratic in the finest sense of the word.

She Does as Romans Do

Finally, should Mrs. S smoke or drink; should she serve tea or cocktails? In many cases, personal preference must give way to the mores of the community in which she finds herself. Certainly, she should not serve cocktails or take them in a tea drinking community (tea in a cocktail community never excites much comment). There is but one answer to this question. Mrs. S, adaptable woman that she is, must let the community be the guide, and it may be bad for Mrs. S if she misreads the guideposts.

In addition to interpreting the schoolmaster to the community through her activities and actions, Mrs. S has many other duties. She must at least "feed the brute and keep him happy," as the old folks used to say. She must always be at home, yet never expect to find the schoolmaster there. Meetings of civic groups, community clubs, graduate work and a long list of other activities demand the schoolmaster's evenings. His days, and long ones they are, are taken by his school or schools. The schoolmaster's wife must expect to be alone and should never reproach her husband because she is. He cannot help himself.

The schoolmaster, after a long and tiring day, wants to come home to someone who appreciates him. He does not have in his office enough privacy for a long enough time to explain to his secretary that he is "misunderstood."

Again, schoolmasters are themselves lonely. To whom can they go with their troubles? To a teacher? A board member? Some chosen friends? None of these are safe receptacles. How many men have been misquoted and their ideas misconstrued by persons who knew the "inside dope" and did not hesitate to spread it?

Major problems are public matters and may be aired in public places. With whom, however, is the schoolmaster to discuss confidential matters? Not with any of the foregoing confidants unless he is willing to have the whole question put up for public discussion before the town or the faculty. The schoolmaster's wife is the only eligible recipient.

She Is His Confidante

Mrs. Schoolmaster must do one more thing. She must provide a shoulder to weep on. We schoolmasters all have bitter disappointments. We cannot make our complaints too public or we lay ourselves open to additional criticism. Our wives must console us and bring us again to the point where we can take up our task and move forward toward the goal we have set for our schools.

Mrs. Schoolmaster, too, is expected to be an immaculate housekeeper, an unexcelled mother and a superior hostess. As you can see, the life of the wife of a schoolmaster is a sinecure, especially if she has three children and does her own laundry.

Practical Psychology

WALTER L. PAYNE

• An electric timer on this tapping board measures the tapping rate of the student at the left.

• A mirror drawing apparatus.

• Depth of perception apparatus.

MODERN school administrators emphasize the educational philosophy that an individual learns to do by doing. If a student completes a process and masters its fundamental principles, a more enlightened type of behavior should result than would be occasioned by his reading about the item or being told about it.

Purposing, planning, executing and evaluating typify the stages involved in student experience and education. Thus, student participation in activities and the resultant experience gained from such activities form the main basis for the modern education movement.

But the question arises: Can the same type of student participation in classroom activities be carried on at all levels of education? For example, can it be conducted at the junior college level in which tradition almost invariably has placed the lecture type of class period and the theme type of term paper?

The psychology department of the Lyons Township Junior College, La Grange, Ill., has attempted to carry through a laboratory workshop program for those students who are mechanically inclined, in lieu of the usual library type of term paper. The purpose of this article is to describe a few cases of this workshop plan of technic and to evaluate some of the results obtained.

Let us picture a situation in which a student is searching for a suitable topic for a term paper in Psychology 201 and has obtained an appointment with his instructor. The following conversation takes place:

STUDENT: It has come time for me to select a term paper topic but I can't make up my mind to write the usual theme type of report. I have been wondering whether I could have your permission to make and test a piece of apparatus of my own design.

INSTRUCTOR: What do you have in mind?

STUDENT: In driving my car to school this morning I almost had an accident because I wasn't quick enough on the brakes. That started me to thinking. I should like to design and make a piece of apparatus that would measure several kinds of reaction time. I have the idea but I need your assistance and advice.

INSTRUCTOR: All right, John, I shall grant you the privilege of making the piece of apparatus. Now before you can make much of a beginning, it will be necessary that you read the literature concerning reaction time in order to have a sound basis for your project. Then you can formulate tentative plans and drop in to see me again.

Through this type of student-teacher relationship the project is carried through to a successful conclusion. Not only is an excellent piece of equipment added to the psychology laboratory but a young man is enabled to formulate plans and carry through to completion a worth-while project. The project is finished when he has tested his classmates with the apparatus built.

Motivation is not lacking in the laboratory workshop type of project. Furthermore, the training involved is of a higher quality than that involved in writing a term paper after having read several books.

To get back to John's project. As completed, the apparatus uses an especially designed chronoscope (made by an electrical equipment company) which measures reaction time to 1/100 second. Connected to the chronoscope is a light bank consisting of three colored bulbs so arranged that one or more bulbs can be flashed at the same time if the experimenter so desires. The experimenter operates a silent mercury switch, which flashes the desired bulb and at the same time starts the chron-

• Left: A demonstration box used to show the three levels of nervous reaction. Small bulbs are progressively flashed to trace reflex, coordinating and thinking levels of nervous reaction.

in the Junior College

Instructor in Psychology
Lyons Township Junior College, La Grange, Ill.

oscope. Through means of a push-pull type of switch held in the subject's hand, the circuit is opened and the chronoscope is stopped as soon as the flashing bulb has been perceived. The experimenter can return the hands of the chronoscope to their original setting after charting the reaction time rate.

Through means of variation in the technic many types of reaction time, such as simple, choice and discriminatory, can be measured. A further addition to this apparatus, a voice key for the measurement of auditory reaction, is being made at the present time.

Another kind of equipment designed and constructed by students is the illustrative type of box. For example, the demonstration box to test the levels of nervous reaction is so built that the operator can trace these levels from the releasing of the impulse by the stimulus, through the nervous system and then through the resultant muscular activity. The three levels traced are the spinal cord, or reflex, level; the thalamus, or coordinating, level, and the cerebrum, or thinking, level.

A similar type of illustrative equipment shows the various endocrine glands of the human body. By means of a rotating switch any gland can be illuminated. Various kinds of mazes, including the raised level and the tracing level types, also have been made.

Recently one of the psychology students planned and perfected a visual discrimination box. It is so constructed that three different colors of lights can be made to appear in three different intensities. Such an instrument is valuable in studying the effects of various colored lights on stage properties and settings.

Some other excellent designs of apparatus made by our students are as follows:

1. A manual dexterity apparatus, for the purpose of measuring special aptitudes.

2. A multiple choice apparatus, utilized to measure how individuals perceive and react to relationships between common elements in a situation.

3. A mirror drawing apparatus, for the purpose of studying types of learning and negative and positive transfer in learning.

4. An automatograph, used to measure arm and hand movements during attentional adjustments.

5. A steadiness apparatus, utilized to measure the tremors of the hand and arm accompanying various stimuli.

6. An especially prepared set of weights, to illustrate the principle of Weber's law.

7. A disk rotator, for use in blending colors presented to the eye.

8. A Galton bar, to compare variable and standard spaces.

9. A tapping board, to test muscular control, eye coordination and speed in tapping.

10. A depth of perception apparatus, to test perception of relationships resulting from the interfunctioning of various sensory organs.

In addition to other pieces of apparatus, too numerous to mention, our psychology department has 200 beautifully prepared illustrative charts, all of which were made by students.

Definite results that have been derived from this type of student activity may be summarized as follows:

1. The department has been excellently stocked with equipment; thus, more effective work can be accomplished.

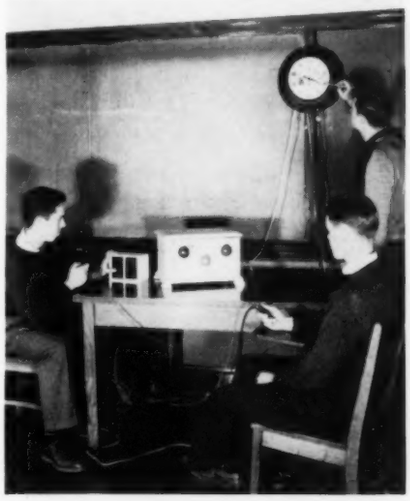
2. The students are happy in their work because they are constructing something worth while and are at the same time highly motivated.

3. The department is enabled to take care of the mechanically minded type of student who may not be able to excel in the library type of work.

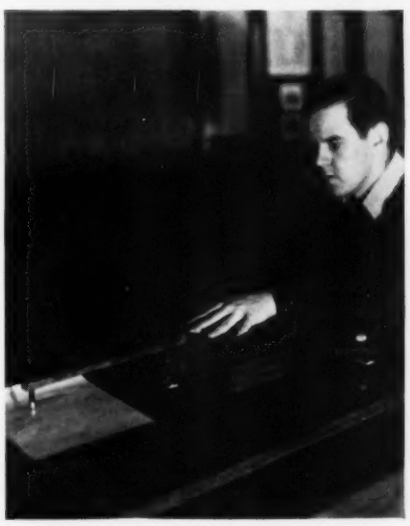
4. It makes the course in general psychology more interesting because students are actually tested in life situations. This brings psychology down from the philosophical level to the practical applied level, thus enhancing its value to students.

• A manual dexterity test used to measure special aptitudes of the students. This apparatus was made by junior college students.

• A reaction time apparatus. The operator at left presses a switch that starts the chronoscope. The subject at right stops the device.



• The automatograph, an instrument that is utilized to measure the movements of hands and arms during attentional adjustments.



A Loan Plan for Textbooks

RALPH E. BRANT

Superintendent, Vassar, Mich.

THREE years ago a local school patron at Vassar, Mich., in expressing indignation regarding the cost of the textbooks that his children needed to start school that fall, suggested that the school handle all books and sell them directly to the pupils at cost, thus eliminating the buying of textbooks through local merchants.

This and other remarks led to the recognition of the problem by the board of education at Vassar. I was authorized to circulate a questionnaire among the parents of the children attending school to determine the extent of interest.

So many favorable comments were received from parents that the board of education elected to try a plan whereby textbooks might be made available on a rental basis to all pupils whose parents subscribed to the plan. The plan was made optional.

Provisions of the Rental Plan

The present tentative book loan plan, which became effective in September 1939, is as follows:

1. The Vassar public schools made available to each pupil from kindergarten through grade 12 one complete set of textbooks for the year 1939-40, not including work books, tablets, pencils, paper, crayons and other similar articles that would be consumed during the school year.

2. Each child donated one complete set of usable textbooks, which he used the preceding year, these books becoming the property of the Vassar school district.

3. Each child paid a textbook rental fee of $1 upon enrollment Sept. 6, 1939, covering expenses for the school year 1939-40. This fee was used to create a textbook fund to replace worn-out books and to purchase new ones when necessary.

4. If the pupil did not have a complete set of textbooks to contribute, he was expected to obtain the missing books and to donate the complete set to the school.

5. Each new pupil entering grade or high school for the first time furnished an amount of money equivalent to one complete set of usable textbooks and $1 in addition before textbooks were made available to him. The pupil then became eligible to share in the cooperative plan during the following year. More than 68 per cent of the pupils participated the first year.

In return each pupil derived the following benefits:

1. The school lent each pupil one complete set of textbooks, which remained the property of the Vassar school district and was returned at the end of the year. The pupil was expected to exercise the normal care necessary to keep these books in good condition while they were in his possession. The teacher checked the books before and after the loan and any books bearing evidence of careless or malicious use on the part of the pupil were brought to the attention of the parent for adjustment.

2. The school will continue to lend the pupil one complete set of textbooks each year he attends the Vassar public schools until graduation from grade 12, provided he pays a $1 fee at the opening of each school year for the textbook fund.

Each pupil is given a receipt for the books he donated to the school and a receipt for the dollar he pays into the textbook fund each year.

The first day of school each pupil is expected to present his homeroom teacher with his two receipts. A pupil may take the books home to study or use them in any way that he and his teacher desire in order to accomplish the best results.

Textbooks were made available to pupils at Vassar, Mich., on a rental basis in response to a protest from parents declaring their difficulty in providing them. Total book expenditures have decreased and each pupil is properly equipped for $1

In event a pupil does not come to school with his two receipts he is then expected otherwise to equip himself with textbooks.

This plan is flexible in that no one is compelled to subscribe to it. Parents may continue to furnish books for their children if the plan does not meet their approval. Work books, tablets, pencils, paper, crayons and other similar articles that would be consumed during the school year may be purchased locally as has been the custom in the past.

Discrimination Is Avoided

Textbooks furnished by the book loan plan are much more economical for pupils and the school. The plan decreases total book expenditures for the school population; the books always are at hand ready for use, and every pupil is properly equipped the day school begins in the fall. In the past it was a month in some cases before some pupils were able to obtain books, thus putting them behind from the start. Those who could not previously afford books, as well as those who could, are now on an equal basis and discrimination between indigents and others need not be made.

A family starting a child in grade 5 expends the cost of only one set of books and at the time he is graduated from high school will have spent an additional $8, an amount far less than the cost of a complete set of books for each of the remaining seven years.

A boy who previously attended a rural school and entered the ninth grade of Vassar High School will have spent altogether by the time he is graduated the cost of one complete set of textbooks, plus $4.

A parent who starts a child in kindergarten will need to spend only $13 for textbook fees, plus the cost of one complete set of textbooks, for the thirteen years it should take the child to complete the twelve grades.

What Has N.Y.A. Started?

MARGARET J. SYNNBERG
Teacher, McKinley High School, Chicago

"GETTING on N.Y.A." has become an increasingly popular expression among high school pupils and college students. N.Y.A. is an accepted part of school operation. Nevertheless, "getting on N.Y.A." has come to mean tremendously more than getting on the pay roll of the National Youth Administration. Becoming an integral part of that vast pay roll has injected a new element into the consciousness of several hundred thousand young men and women. Just what that element is, whether it is praiseworthy independence or paralyzing dependence, an asset or a liability, is not yet known. But at least one can observe what is happening on the surface.

The National Youth Administration, maintained by funds appropriated annually by Congress and administered by the states, exists primarily to assist college and university students between the ages of 16 and 25. Early in its existence officials found that a large number of boys and girls eligible for assistance, that is to say, 16, 17, 18 and 19 years of age, were still in high school. Thus, it was necessary to adapt the offer in a special way to meet the simpler needs of high school pupils.

Placed on Scholarship Basis

A maximum monthly check of $6 for high school boys and girls seemed adequate. A partial scholarship to be earned on an hourly basis by deserving pupils should meet with no opposition.

Beginnings of movements are often obscured by later developments. It is doubtful if the original objective of the National Youth Administration, to keep American youth in school and out of early competition in industry, had much to do with the subsequent growth of the N.Y.A. idea.

Most of us recall the immense prodigality of the early relief administrators, whose orders for clothes, shoes, household supplies, food and other necessities were distributed with charitable secrecy that left no scars of wounded pride. Most of us also recall that the mounting number of relief cases quickly put an end to the private nature of the assistance and to liberal considerations, that as the spread of cases became wider, individual relief grew thinner and that, finally, the meagerest of monthly budgets based on family membership became the rule. It was out of these scant monthly allotments that there came the cockle seed that grew side by side with the original wheat of the N.Y.A. planting.

Help Needed for Older Children

For months prior to the inauguration of the N.Y.A., case workers in local relief agencies had been baffled by endless pleas from relief families for extra consideration for boys and girls of high school age. As far as budgets went, it made no difference if a child were 8 or 16 years of age. It was impossible for investigators, overworked and, in many instances, inexperienced, to determine whether or not older children were actually in high school. The few cents a day allowed for a child's keep was hopelessly inadequate to do anything but feed him; case workers were fearful of fraudulent claims for nonexistent boys and girls; matters were apparently deadlocked. In the meantime there were frequent unpleasant scenes in local relief offices.

In the establishment of the National Youth Administration case workers saw the chance of a lifetime to lighten their work. They pounced upon the idea as a defense against any and all pleas from relief clients for clothes, carfare, supplies or any kind of help for any boy or girl over 15 years of age. "Go get on N.Y.A." was the answer to all requests for underwear, trousers, shirts, shoes, notebooks or a 10 cent bottle of ink. Youngsters of 15 were too close to 16 years of age to merit consideration.

High schools in relief districts were besieged by applicants, pupils and their parents, pleading, demanding, insisting volubly on this new kind of money that the case workers had told them the schools were now supposed to hand out to needy boys and girls.

The situation might have had its comic aspects had the needs been less acute. There was too much destitution close at hand for administrators to argue about the justice of what had happened. Overnight the schools had become, instead of the custodians of scholarship funds for promising boys and girls, a distributing agency for aid to every needy pupil enrolled therein.

The machinery for N.Y.A. operation was modeled on that of the W.P.A. Each school that applied for funds was assigned a lump monthly sum, based on estimated need, which represented the total of its pay roll for that period. Schools participating in the program were expected to set up an employment agency, investigate credentials, create jobs, provide adequate supervision for workers, establish a workable wage scale, which would provide for a monthly maximum payment of $6, check the work done by means of weekly government time sheets, submit a pay roll monthly and make whatever changes were required in the school organization to make possible the pupils' remunerative work.

Shift Burden to the Schools

The relief agencies must accept a large share of blame for wrecking the original plans of the National Youth Administration. With absolutely no regard for the type of work that a school could offer to pupil employes and with no attention to the fitness of applicants for the available work, relief officials shifted a definite burden to the schools and washed their hands of it.

School officials took the only humane course that was open to them. They asked for more and more N.Y.A. funds and increased the number of positions.

What happened I saw at first hand. As a timekeeper I have been in service uninterruptedly from the earliest days of the N.Y.A. movement. In

charge of a monthly pay roll containing more than 600 names, I can honestly state that the intricacies of N.Y.A. operation have long since ceased to be bewildering. Over a period of years I witnessed with admiration the conscientious cooperation of more than 100 sponsors, most of them teachers, who made possible the growing pay roll by creating work, planning jobs, organizing projects and training and supervising the most unpromising, but always eager and willing, applicants.

It must be admitted that at first N.Y.A. positions embarrassed pupils holding them. These jobs looked like charity. Pupils who were employed tried to keep their work a secret, hoping that their fellow pupils would not discover their poverty.

Almost overnight came a decisive change of attitude. The schools declared their complete independence of case workers and relief agencies, successfully establishing their right to refuse positions save on their own terms—the same diligence and willingness to work that are demanded in private industry. Once it was clearly understood that necessity should express itself in action rather than in pathetic recitals of need, the N.Y.A. program was firmly established on a sane and wholesome basis.

Perhaps it was the sporting element so marked in American children that introduced a lively competitive spirit into N.Y.A. activity. Quickly it became apparent that a candidate had to be better than the other applicants to obtain a job. A position became something of an achievement and certain desirable posts in offices and special departments were rated as honors.

Early in the history of the National Youth Administration opportunities had been extended to include non-relief pupils whose family incomes were in many instances lower than the monthly relief budgets of families of corresponding size. Since N.Y.A. jobs could no longer be taken as an indication that the employes' families were living at public expense, the last vestiges of possible humiliation disappeared. So with the amazing adaptation of youngsters, boys and girls lost sight completely of the source of N.Y.A. money and entered into the competition with spirit.

So here we are. Regardless of by what route we have come we have arrived at a strange pass. Thousands of 16 and 17 and 18 year olds are earning pocket money provided by the nation's taxpayers. These boys and girls have not the slightest idea that anyone is doing them a favor. "We earn the money, don't we?" is the keynote of their complacent reasoning. The truth is that the schools do see to it that the young people earn what they receive, that is, earn it in terms of the kind of work that a school can offer.

Here and there there is a boy or girl who could earn more money in odd jobs, but the great majority could not earn the equivalent of their N.Y.A. pay checks outside of the school that employs them.

Does the N.Y.A. make boys and girls mercenary? Many of them, yes. In any school with a large N.Y.A. pay roll practically all services in offices, libraries, laboratories and classrooms are preempted by paid employes. Unrecompensed service is extremely rare.

Just what the effects of this arrangement may be is a matter for conjecture. Kindness, helpfulness, generosity, willingness to serve are especially valuable qualities in adolescents. Perhaps these qualities are being stifled.

Only an incurable theorist believes that N.Y.A. checks are spent for school supplies. Even carfare and lunch money do not claim their just share. I can cite hundreds of cases in which the checks go for food for the family. I could name dozens of other instances in which clothes are purchased with the money earned. Just what is auxiliary to education?

It may be that we are merely distributing the wealth, enabling the poor to have things that they would otherwise do without, movies, accessories, cheap permanents, an occasional soda or sundae, an outing or a treat.

How permanent is the N.Y.A.? In our particular high school last year more than 45 per cent of the entire student body personally applied for N.Y.A. positions. Since the government requires that individual records of all applications be retained, there can be no question as to the accuracy of the statement. Almost without exception the applicants came from families with incomes in brackets low enough to justify their requests. Where does the N.Y.A. propose to lead us?

No objections will come from the parents of the lucky or unlucky young people who are receiving government checks. The extra money is welcome in every home. No alderman, congressman or other elected official will risk criticism of anything that helps deserving underprivileged youth to obtain an education. So whither N.Y.A.?

Should Youth Discuss Issues?

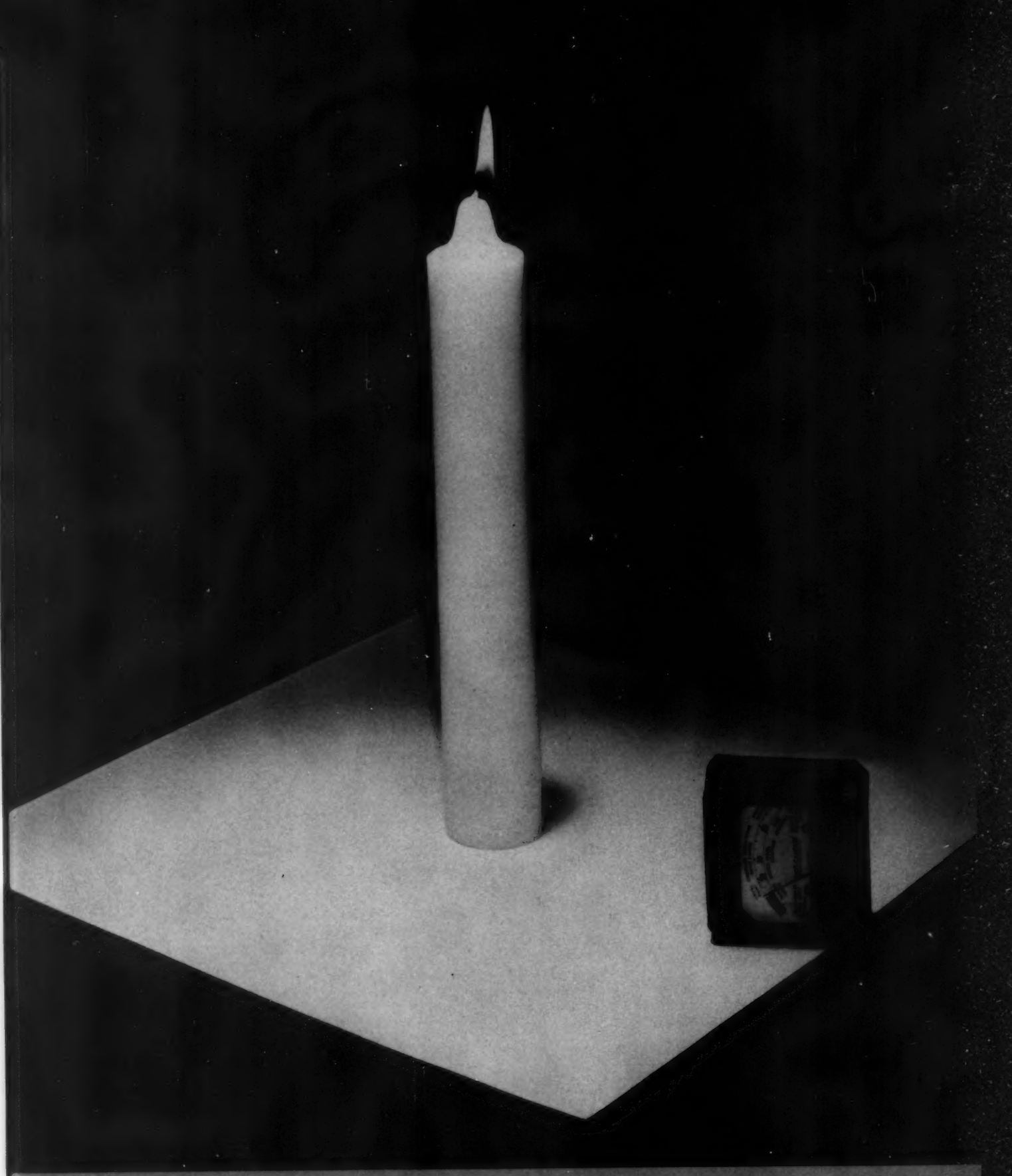
AMONG the general public there are usually differences of opinion on such questions as labor unions, war and government policy. Do you think that young people in church groups, social groups and other youth organizations should discuss such questions among themselves?

This question was put to the American public in a poll of opinion regarding education, conducted by the American Institute of Public Opinion for the American Youth Commission.

Seventy-two per cent of the general public believe that young people should discuss controversial topics among themselves; 18 per cent are opposed to such discussion; 10 per cent had no opinion. In the South only 64 per cent favor discussion by youth as compared with 84 per cent in the West. Among the economic groups, 87 per cent of those of the upper income level approve of freedom of discussion, as compared with 78 per cent of the middle and 61 per cent of the lowest economic level.

On the basis of information possessed by respondents, the proportions favorable to free discussion were: 83 per cent among the well-informed; 78 per cent, the partly informed; 62 per cent, the ill-informed. Relatively more of the ill-informed said that they had no opinion.

The age of respondents also is reflected in their attitudes. Young people are more in favor of free discussion than are older people.



PORTFOLIO ON

School Lighting

Yesterday and Today

MORE research by educators, psychologists, illuminating engineers, ophthalmologists and optometrists is required before we will have scientifically determined the effects of light intensity, direction and glare on visual acuity, eye fatigue and achievements of normal and subnormal eyesight.

There are certain assumptions, however, that may safely be made regarding classroom lighting: (1) that there should be from 10 to 15 foot candles of light on every classroom reading area; (2) that there should be the minimum of glare and surface brightness from reflective surfaces and light sources; (3) that natural illumination should be utilized insofar as possible and that artificial light should be employed only when and where natural light is insufficient, and (4) that installation and operating costs are vital factors to be considered in public school buildings.

Although other types of artificial lighting are possible, we are concerned here with incandescent and fluorescent lighting only. Light can be direct, indirect or any ratio between the two. Unless all the classroom surfaces are totally black, there will be some indirect light even from direct units. Direct units may be exposed, shaded or installed in translucent enclosures.

The early installations of electric lights consisted of exposed bulbs, either screwed into ceiling sockets or suspended on drop cords. To most school people, this type of light is ancient history, but the exposed bulb does still exist and many schoolrooms throughout the country do not even have that. Although this type of light violates practically every principle of lighting, it does give the maximum light intensity in proportion to installation costs and produces a higher ratio of foot candles to watts than is found in any other type of incandescent system.

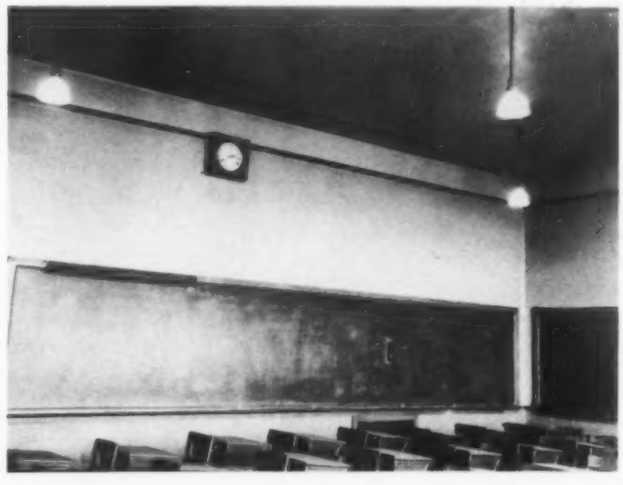
The chief objection to the exposed bulb is its high surface brightness, which is even more objectionable when suspended in the line of vision. The exposed bulb can be ruled out if we are considering satisfactory means of lighting classrooms.

The shaded light or exposed bulb mounted below a reflector is not any better than the unshaded exposed bulb. Its surface brightness is just as objectionable and its distribution is worse. The bulb and reflector, however, are effective in providing a high illumination on a limited local area. This type of installation might be justified if mounted high in a small room or used as a table or individual machine light and shaded with an opaque shade so as to protect the eyes from the light sources.

The commonest classroom lighting in current use is the glass enclosed direct unit. Many types of glassware have been developed for this system of lighting. The indirect effect of this unit may be increased by increasing the translucency of the upper portion of the enclosure. There is some controversy regarding the proper height at which the enclosed unit should be installed and this will vary somewhat with the glassware used. Suspending most units will brighten the area immediately below the fixtures but, if they are primarily of the direct type, better light distribution will usually result from ceiling mounted units.

Another advantage of higher mounting is to keep the light sources as far as possible out of the line of vision, which is especially important if the bottom of the unit has a high surface brightness. One cannot mention area, number and wattage without exposing his "neck," but I will hazard the opinion that a 22 by 30 foot classroom may be lighted fairly well with six ceiling mounted, 300 watt, glass enclosed commercial units.

There is no definite line of demarcation between direct and indirect lighting systems. Some place between the two extremes are the semi-direct and semi-indirect units. A popular and attractive unit is the open bowl with the translucent bot-



Right: An example of the shaded, exposed bulb fixture. It is not any better than the unshaded exposed bulb. Its surface brightness is just as objectionable and its distribution of light is worse.

Left: An example of drop cord, exposed bulb lighting in a recently abandoned school at Nashville, Tenn. Note the exposed wiring, double fixed seats and study hall, all of which are as obsolete as the lighting fixtures.

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tom. Such units, when suspended about 3 feet below the classroom ceiling, give a pleasing effect by blending the efficient direct light with the less efficient but more desirable indirect light reflected from the ceiling. These units are superior to the direct enclosed units but, for the same light intensity, are more expensive in original cost and in operation.

The totally indirect light probably is the most desirable type of incandescent classroom lighting. In the modern type of educational program, there is considerable movement about the classroom as pupils participate in various activities; hence, it is highly desirable to provide a uniform distribution of light throughout the room without glare or shadows. This is the effect produced by the indirect light from borderlight moldings or from suspended opaque bowls or troughs. Since indirect light is reflected downward from all portions of the ceiling and upper walls, shadows are practically eliminated.

Right: An example of semi-indirect lighting units in the new Howard School, Nashville, Tenn. Note the contrast between this library and the old study hall that it replaced, lower left, opposite page.

Left: An example of direct ceiling mounted classroom commercial lighting units. Notice the maximum use of natural illumination and window shades that pull up or down from the center sash.

Another great advantage of indirect light is that the glare of surface brightness is eliminated because the light sources are not visible. It should be remembered, however, that it is difficult to produce high illumination on the desks from indirect sources without having a ceiling brightness that might become fairly objectionable.

The greatest obstacle to indirect classroom lighting is its cost. Since the light must be reflected twice, there is a double loss. With the proper bowl reflectors, light colored ceilings, clean air, ideal janitorial service and frequent painting one might expect 90 per cent reflection from the bowl and an 80 per cent reflection from the ceiling, giving an effectiveness of 72 per cent. If, however, the bowls are allowed to get dirty, reducing them to 70 per cent reflection, and the walls get dirty and discolored with age to the point of 50 per cent reflection, the net effectiveness of indirect light is reduced to 35 per cent. In dirty and smoky sections, with the average janitorial service, the conditions may often be worse. This means that the light bill is three times as high or the light is only one third as adequate as in direct lighting. The conditions for indirect lighting are made still more unfavorable by the use of acoustical ceilings, which are now considered essential in a modern classroom.

The fluorescent tube has been hailed as the greatest advance in lighting since the incandescent light replaced the old carbon light. Although the fluorescent light is well past the laboratory stage, it is still an infant in the light fixture family. Public school administrators must recognize its advantages but be cautious about its wholesale installation. The fluorescent light does not solve all the lighting problems and probably creates some new problems. Among the advantages of the fluorescent light is its high ratio of lumens to watts with corresponding low ratios of surface brightness and heat to lumens.

The fluorescent light seems to offer a solution to the urgent problem of providing more adequate light in old school buildings with limited wire capacity. With the fluorescent tube the foot candles can be multiplied three or four times without rewiring. Its low ratio of heat to lumens gives it decided advantages in buildings with summer air conditioning systems. The tubes can be installed in strips or in units, ceiling mounted or suspended, direct or indirect.

Because of their low surface brightness, these lights can be installed as direct units on classroom ceilings, causing little glare. The surface brightness can be even further reduced by the use of translucent shields clipped on the bottom of the tubes. They should, however, be installed in groups of two or more parallel tubes in order to reduce the stroboscopic effect, unless future developments in the fluorescent tube eliminate this objectionable feature. At present, fluorescent lights are economical as to current consumption but expensive as to original cost and tube replacement. Standardization and mass production eventually should bring this type of lighting within the range of public school budgets.

Better Safe Than Sorry

HANS SCHMIDT

ONE of the technical problems confronting administrators and school boards is that connected with lighting and power service and their installations. Of course, many situations entailing electric wiring and service are handled by the engineer or architect and no problems are encountered. However, experience shows that there are many more schools in which administrators do not have access to an engineer or have no budget to cover his services. Then there are those who "know" and who need no advice or suggestions; last, though by no means least, there are the "electricians" who work by rule of thumb or no rule at all.

Discussion of the subject is particularly timely in view of the increased attention being paid to artificial lighting, the greater demand for power service because of increased activity in vocational fields in our schools and the large amount of remodeling now going on in older school plants. There are problems connected with all of these.

Licensing Not a Safeguard

Some may say: "In any case I have no worries as all electricians [usually a perfectly meaningless term] are licensed." That is true in some states, but not many, and there are differences as to what licensing covers. In one instance such a licensed electrician could determine the carrying capacity of a solid conductor but was completely baffled when it came to a stranded one; circular mils was not in his vocabulary and No. 14 wire was "standard" with him. Let us look into the actual situations and discuss them, particularly from the safety angle.

The older wiring in school buildings erected twenty-five or more years ago is unable to carry the modern lighting load even if the latter is at a minimum. Plenty of examples can be recalled in which only two outlets per room are provided. Even with the high wattage of the old 16 and 32 candle power carbon filament, the capacity of the wiring is invariably too low. Yet there many instances in which such wiring is loaded with six 200 or even 300 watt lamps without a change in the original main or branch circuits. Can one question the fire hazards involved?

Pennies have been known to be "rescued" from the depths of plug fuse blocks. The 10 and 15 ampere fuses were not sufficient to carry the load and so the "safety valves" were tied down with pennies. Why the wiring had not started fires is a mystery, but then there are many school fires caused by "defective wiring" and that term covers a multitude of electrical sins.

Not only was such original wiring poorly done—knob, tube and cleat work was common and plenty of unsoldered joints are still in evidence—but also no time, effort or money was spent to keep the system in even fair shape. Only recently several wires were rescued from certain death by being removed from a steam pipe over which they had draped themselves; the rescue blew the main fuse.

One janitor worked in the dark in his coal bunker because he was knocked off his feet when he turned on the brass shelled key socket. Why he was not knocked out permanently nobody knows, but he did not change the socket to a porcelain one or install a switch. Such is the tryanny of *laissez faire*. Similarly, in another ancient school, the handle of the motor compensator starter was covered with a piece of rubber hose.

Why Accidents Happen

Have you seen entrance service wires led to a board with open switches and plug fuses mounted on attic studs or rafters over a yawning abyss between studs and leading down to no one knows where? What a beautiful layout in case of a blow or lightning discharge! It is really a marvel how these schools get by so long without accidents.

There is another feature involved in such old time wiring and sometimes even in new work: little attention is paid to voltage drop. Though this is not hazardous, except to the pocketbook, it results in inefficient operation. When there is voltage drop below 2½ per cent, the permissible maximum drop, waste results in heating the wiring and the lumen emission drops increasingly; a 5 per cent drop will reduce the light about 15 per cent. Especially sensitive to voltage drop are the new fluorescent lamps whose light falls off in a disproportionately high ratio to the voltage drop.

To reduce voltage drop wiring of adequate size must be used. In consideration of future requirements it is well to provide blank circuits. Convenience outlets are usually wired with too small a capacity, especially when they are common with lighting circuits. The supposition that such outlets will be used primarily for plugging in a 60 watt desk lamp is not well founded. Electric hot plates, irons and 500 or 1000 watt projectors are in common use. So the circuit groans, blows a fuse or just gives up the ghost.

Indirect Load Is Greater

Fortunately, modern lighting circuits are usually designed for ample carrying capacity and, as constant improvements in lamp manufacture increases the lumen emission, a greater factor of safety is provided. However, the load for an indirect system of lighting is considerably greater than for a direct system. Definite assumptions or fairly large loads had better be made in the beginning to obviate poor operating characteristics later.

Shop wiring, especially that devoted to power circuits, is often poorly designed and subject to much abuse. Machines are frequently moved from their original location and many times the change in wiring is done by an amateur or by the janitor with disastrous results. Frames of all power machines should and, in some cases, must, be grounded not only to prevent shock but also to prevent an accumulation of a static charge, especially potent in high speed machines and saws. A case is known of a severed finger because of an involuntary movement of the hand when the static discharge from a saw table was heavy.

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The portable light power machines, now so prevalent, have hazards of their own in terms of poor flexible cords, flimsy plugs, overloaded circuits and poor outlet devices. One example was observed where a 1½ h.p. single phase motor was plugged into a convenient outlet that had partly fused, the plug was tied in with string and there was a 30 amp. fuse on a No. 14 rubber covered wire with a total load of 2600 watts, partly lighting. The shop teacher could not understand why "the lights were so low and flickered." One cannot understand why the whole job did not blow up!

The whole setup of a shop calls for particular care in wiring and control, in devices, in excess capacity and in flexible layout. The loading of shop facilities during the present national emergency aggravates many situations. Care is definitely indicated.

The home economics laboratories also have their troubles but as power machines, except sewing machines, are not ordinarily used, most of the difficulties are connected with irons and electric hand irons. Even today one may find many outlets for irons without the telltale red light. Frayed cords and poor plugs are frequently found and No. 18 common cords, instead of the No. 16 special asbestos type, are still in use. We also find portable heaters without screens, and hair dryers with overloaded or defective heater elements. Electric stoves and hot plates are usually safe but too often they are connected to old wiring, which just will not stand the gaff.

In the older schools the wiring for stage lighting is below present standards in most respects but even in new buildings we frequently find layouts of insufficient capacity either as an economy measure or on the false assumption that the use of the stage and its lighting is limited. One must reckon with the enthusiastic pupil "stage electrician" and, therefore, guard against hazards all about this area with its flimsy materials and inflammable properties. Cords wrapped around nails or hung over pipes, impromptu stage pockets, home-made footlights and borders mounted directly on wood, twisted and unsoldered splices and connections, untaped joints, trailing cotton cords and overloaded circuits, these are by no means rare. The rarity is that more accidents do not happen.

On a recently checked plan, a part of the specifications on the electrical work read as follows:

"The stage lighting and fittings are not a part of these specifications and contract and are to be let in the future under a separate contract. Electrical contractor will install three No. 12 rubber covered feeders from junction box B and dead end same at a point on the stage to be approximately located where shown on plans."

The stage was of good size and would later call for at least three 20 foot borders and 26 feet of footlights aside from spots, strip and other lighting devices. The border and footlights alone would call for a load of from 70 to 90 amperes, to say nothing of the rest; in other words, someone did not know what it was all about. Fortunately, it was caught in time and corrected. Situations like this are too common to be ignored.

In conclusion, it might be said that the attempt to "remodel and modernize" an old wiring system is usually futile. Insulation does deteriorate, wires do sag and even the old standby, the circular loom, is not everlasting. Too, joints are often poor and pulled-in wires in rigid conduit are often almost scraped bare.

In the long run, it is better to discard such old systems and start from scratch; the best is none too good nor too safe. Let us do away with key sockets or even pull-chain sockets, and look out for the versatile extension cords and lights. It is a marvel that we do not have electrocutions but then we do not have bathtubs in our schools, except the tubs and pools in our orthopedic quarters and no doubt due care is taken there so that electrical hazards are minimized.

So let us be safe rather than sorry, spend a little more money so that we will not need ever to feel sorry and give the reliable designer a chance so that we may feel safe.

The school should restrain the enthusiastic pupil "stage electrician" to guard against hazards all about this area with its flimsy materials and inflammable properties. Even in new buildings electrical layouts are often of insufficient capacity for stage lighting.

Types and Trends in Lighting

Above: Continuous rows of troffers equipped with 40 watt fluorescent lamps light this combination study hall and library. Lower Right: The design of this aluminum painted metal ceiling is such that light is directed downward.

FOR the greater part of the time that the tungsten-filament lamps dominated general lighting without serious challenge, lighting methods, units and results were lumped together and divided simply into direct, semi-indirect and indirect classifications as far as the school was concerned.

Thus, for instance, direct lighting from relatively small, bright equipment, usually resulting in direct and reflected glare and shadows, was associated with a poor quality of lighting for the classroom. On the other hand, indirect lighting is associated with equipment, either opaque or of low brightness, that directs practically all of the light toward the ceiling. The ceiling thereby becomes a secondary source of low brightness, thus reducing glare and minimizing shadows. In the classroom, indirect lighting has become a synonym for lighting of high quality.

Recent lighting developments have done much to discourage the loose application of a single term to methods, equipment and lighting results. For instance, when the subcommittee on lighting in the printing industry, committee on industrial and school lighting of the Illuminating Engineering Society, published a progress report in March 1936, one of the significant contributions of the report was the introduction of a direct lighting unit of large area and low brightness. As industrialists became acquainted with the advantages of, in effect, localized indirect lighting, additional methods of obtaining the desired result were devised. Literally miles of such equipment have been sold.

Then as lighting practice in offices and drafting rooms progressed it was found that with indirect lighting at around 50 foot candles large areas of ceiling reach a brightness at which direct glare becomes noticeable. (This brightness is still relatively low, however, when compared to the brightness of direct lighting units of small area.) Of course, for the lower illuminations found in the classroom, indirect lighting presents no problem in this respect. In general, indirect lighting is the recommended method of classroom lighting.

In order to obtain the higher foot candles of well-diffused light in offices and drafting rooms, so-called "coffer" lighting was developed. As installed in numerous buildings this consists of coffers approximately 4 by 4 feet (some 15 inches deep) recessed into the ceiling on 8 foot centers. With this type of lighting the brightest part of the ceiling is hidden from the normal field of view. These are really direct lighting units and, thus, as was the case for the types of equipment resulting from the subcommittee study, direct lighting units may provide light meeting the requirements of the classroom.

The introduction of the extended shape, lower brightness fluorescent lamps brings the concentrated, brilliant tungsten-filament lamps real competition in the general lighting field. The new source is obviously inherently adaptable to large areas and low brightness. Furthermore, if the lamps are shielded from sight in the normal viewing angles, such lighting may allow the light from the lamps to reach the work plane without modification and still be satisfactory for the classroom at the higher foot candle values. At low foot candles, reflected glare, particularly, can be annoying. The so-called "direct-indirect luminaires for fluorescent lamps already have found a place in the school. These units shield the lamps from view in the direct glare zones while still allowing lamp brightness at other angles.

It appears from the foregoing that we have reached the point at which we should abandon our old rule-of-thumb method of judging, become

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more specific in designating the distribution of a lighting unit and, above all, realize that it is not alone the type of lighting that makes an installation good or bad.

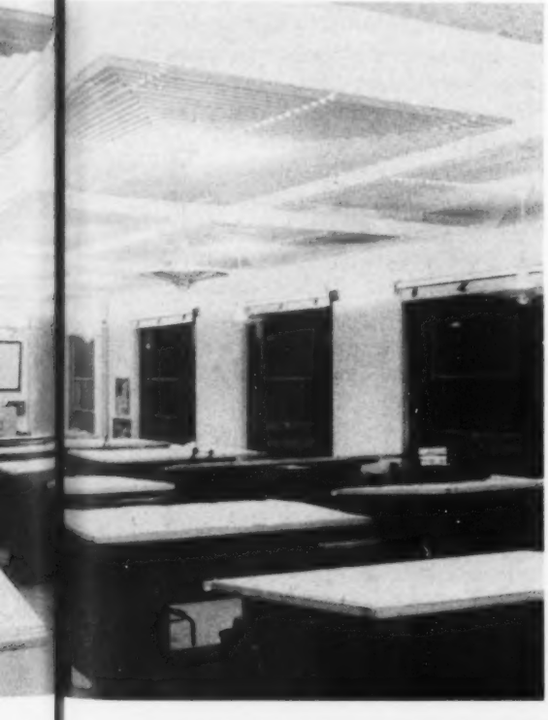
The International Commission on Illumination has adopted the five classifications for types of units given in table 1. The following paragraphs briefly discuss the five classifications.

Table 1—Classification of Luminaires by Distribution

Classification	*Percentage of Light Output* *Upward*	*Downward*
Indirect	90-100	0-10
Semi-indirect*	60-90	10-40
General diffusing*	40-60	40-60
Semidirect*	10-40	60-90
Direct	0-10	90-100

*Units falling in these classifications but with low brightnesses in the direct glare zones are often referred to as direct-indirect.

1. From 90 to 100 per cent of the light output of the indirect type of luminaire is first directed to the ceiling and upper sidewalls, from which it is reflected diffusely to all parts of the room. In effect, the entire ceiling becomes the light source. With such a large area serving as the source of light, little direct glare is experienced with illuminations below 40 to 50 foot candles. Shadows and reflected glare are thus practically eliminated.



Above: The 500 watt silvered bowl lamps in indirect luminaires provide of the order of 25 foot candles average in service in this classroom. Indirect lighting is the preferred system for illumination in most classrooms.

The lighting units may have either opaque or luminous bottoms. When tungsten-filament lamps are used in open or clear-top luminaires, the lamps should be frosted inside to obviate streaks and shadows on the ceiling that result with clear lamps. Ceiling brightness in the normal field of view can be reduced materially by the use of a formed metal ceiling with an aluminum finish; this ceiling directs the light down rather than diffuses it in all directions, as is the case for the flat ceiling with a matte white finish.

2. A semi-indirect lighting distribution is defined as one in which from 60 to 90 per cent of the luminaire output is emitted upward toward the ceiling and upper sidewalls while the rest of the light is directed downward.

This classification includes some of the newer types of direct-indirect units. The term "direct-indirect" was adopted to differentiate between these units and those having the same amount of light up and down but with more uniform brightness at all angles below the horizontal.

In general, semi-indirect units give a little more light for the same wattage than do indirect units but more attention must be given to the factors of direct and reflected glare.

3. General diffuse lighting includes luminaires providing the predominant illumination on horizontal working surfaces directly from the lighting units but with a considerable contribution from upward light reflected back from ceiling and upper wall areas. The distribution of some of the direct-indirect luminaires places them in this classification.

4. From 60 to 90 per cent of the output of the semi-direct type of luminaire is directed downward to the working surface. There may be, therefore, come real contribution to the illumination at the working plane from light that is directed upward and reflected by the ceiling and upper wall areas. While for the most part luminaires in this class are of the open bottom type, the distribution of some enclosed glass units places them in this grouping.

5. The direct classification includes any lighting unit directing practically all (from 90 to 100 per cent) of its output in angles below the horizontal, *i.e.* directly toward usual working areas. Experience indicates that where it is desired to use one of the direct types of lighting for the classroom, 25 per cent or more of the ceiling area should be devoted to the lighting units; otherwise, they may have too high a brightness.

Classrooms

MUCH confusion exists in today's lighting because of the emphasis placed on foot candles available at the working surface. There has been a steady increase over the years from 5 to 8 recommended foot candles to whatever occurs to the individual making the recommendation. As a result, recommendations are being bandied upward from 25 or 30 to as high as 100 foot candles.

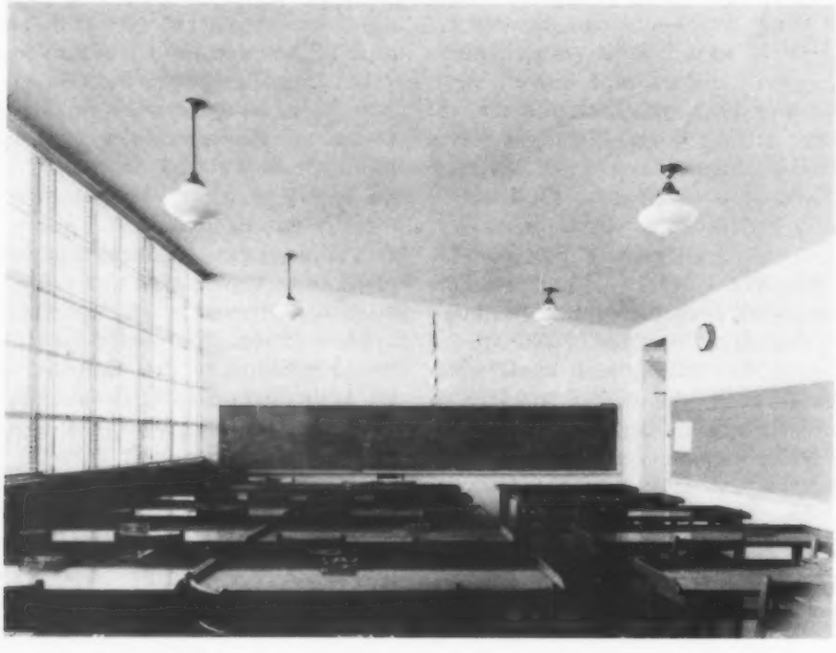
Physical determinable factors and factors determined by sensation are difficult accurately to relate when combined in lighting experiments. There is research to show that visual acuity increases as luminosity increases at all levels tested. There is a diminishing return on the rate of increase of acuity beyond about 10 to 15 foot candles.

While an increase of foot candles has a resultant increase in acuity, it is not directly proportional to the increased luminosity. As most authorities agree that vision increases as the logarithm of the illumination, increasing the illumination from 10 to 100 foot candles will have about the same effect as the increase from 1 to 10 foot candles.

Obviously, high luminosity levels are difficult to defend with the ever increasing difficulty of obtaining funds for such increase. As higher levels of illumination are recommended they constantly are subjected to sterner criticism for both their lack of test data, evidencing such need, and increased expense.

The National Council of Schoolhouse Construction's 1937 and 1938 proceedings include reports of the liaison committee with Illuminating Engineering Society and American Institute of Architects and the Committee on Schoolhouse Lighting, respectively. These reports were given by R. H. F. Halsey, at that time deputy superintendent of buildings in New York City. The former deals with the attempts to obtain a greater interest in the ophthalmological support of the higher levels. In the slight interest that was taken attention was called to the faulty distribution of light rather than to foot candle measurements. The latter report deals with the tremendous cost necessary to obtain the higher levels of lighting required in the American Recommended Practice of School Lighting, approved in 1938.

The same report questions the current vogue of setting up test classrooms, one of ordinary lighting and the other of higher intensity. These experiments have been conducted in many places, the one at Tuscumbia, Ala., being the first and best known one. The most recent of these tests was reported in the I.E.S. Transactions, December 1940. Invariably, these carry the experiment to show in dollars and cents economies resulting from lack of pupil failures resulting from increases in lighting. There is considerable belief among those familiar with school research that the un-



Top: An overhead lighting system employing 50 fluorescent lamps of the daylight type, each tubular in shape and 4 feet long, in the Caledonia School at East Cleveland, Ohio. Bottom: Classrooms in the Susan Miller Dorsey High School, Los Angeles, have sloping ceilings, to increase efficiency in natural illumination, that are 14 feet at the outer wall and slope to 10 feet.

DOYT EARLY
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controlled variables and complexities involved in such studies make it extremely difficult to obtain results that are of any consequence.

Discussion of acuity is oversimplified by not taking into consideration the other qualities of seeing. It is true that lighting levels in nature are considerably higher than those found in the ordinary classroom. The mere statement of high light levels among other aspects ignores discussion of brightness contrasts. H. L. Logan in "Specification Points of Brightness," presented to the I.E.S. convention, August 1939, reviewed brightnesses found in the outdoor visual field. Here, in a study involving brightness contrasts seen in nature, ranging from snow, clouds, sunshine, beach and other conditions, a maximum contrast of brightnesses in the entire field of vision was found to be 39 to 1. Probably there are many times when contrasts occur exceeding this. However, contrast ratios not exceeding 3 to 1 occur in 56 per cent of the cases. Further, ratios not exceeding 10 to 1 include 81 per cent of the total situations.

The brightness contrast ratios found in nature are supported by tests made to show the effect of the surrounding brightness on the visual task. These show that the eye is less efficient when the surroundings are either more or less than the object and its background or, in other words, the seeing task. In checking brightness contrasts in a number of schools ratios exceeding 1000 to 1 are not uncommon. It is doubtful even if ideal seeing conditions can be achieved in the standard classroom without expenditures of such magnitude that the average school would be unable to finance them. Perhaps as time goes on we shall find means of changing our method of construction to achieve these ends more logically.

Evidence of such effort may be seen in some of the schools recently built in California. In "Design for Daylight in School Buildings," a paper by Dr. Leland H. Brown of Stanford University, which was presented to the First Annual Pacific Coast Conference of the I.E.S., Los Angeles, April 1940, conditions in some of these schools are given. These schools do not agree with the recommendations of the stock prescription for adequate classroom lighting since in many cases they are daylighted by auxiliary sources; many of them have higher windowheads; one of them has sawtooth lighting, and one has clerestory lighting. Obviously, the old ratio of windowhead height to classroom width is valueless. Doctor Brown reports two schools have brightness ratios as low as 15 to 1. The lowest in another school was 113 to 1 and others were as high as 725.

Before and After: The photographs above are of the same classroom in the Alma High School, Alma, Mich., before the old lights of the drop cord type of lighting were removed and after they were replaced by modern indirect fixtures. Photographs were taken without auxiliary lighting.

In the thorough research carried on to improve the lighting in the Sausalito Elementary School, which has been extensively reported in many publications, achieving foot candle levels in accordance with any standard was the simplest part of the difficulty. Reducing the brightness contrasts proved the most troublesome factor.

There always is a natural economical urge to make as much use as

possible of daylight with as little electrical illumination as possible. Investigation of classroom lighting with almost any type of shade will show that the ratio of the lighting from the window to the dark side of the room ordinarily remains constant. The need is for decreasing the ratio at the window with respect to the light on the inner rows of seats. When this cannot be done by blinds the only alternatives are either auxiliary lighting from secondary windows or electric lighting.

Inspection of a venetian blind from the pupils' desks shows that usually all sky brightness will be cut out except that of the lower rows of slats. In the Sausalito experiment Superintendent Ray recommended painting the top side of the slat white, the lower side light blue and adjusting the lower slats separately. This automatically will cut the sky out of the field of vision and will reduce the source of contrast.

If the next greatest source of contrast is to be eliminated we shall see the end of blackboards as such. In all studies they are the lowest brightness found in the classroom. Changing the blackboard, which is really gray, to one of the present available types of light colored board written on with a dark crayon should eliminate part of this difficulty. The comparatively large area of dark board no longer will absorb part of the illumination. As much of the light entering the classroom windows and falling on the inner wall is nearly horizontal, more would be reflected and made available for sight if light boards were used. An incidental characteristic of the light board is that any reflection of light tending toward glare merely increases the contrast with the dark crayon.

In his specifications for improving the seeing conditions at the Alameda High School, R. L. Dearborn, independent consulting engineer, states that if the funds are not sufficient to cover the entire work of painting, shading and electrical modernization, the repainting should be the last item to be omitted. Mr. Dearborn further states: "Since painting is the most important part of the work it is deserving of the most careful planning and supervision. Briefly, there are three general considerations involved in classroom painting: (1) design of contrasts, colors and brightnesses to provide optimum visual efficiency and comfort; (2) use of color to create a cheerful environment; (3) selection of reflecting qualities to provide for reasonable lighting efficiency."

Even low tables used in kindergartens can be lighted by indirect fixtures.

On north exposure, light colored shades may be used to cut out brightnesses resulting from sky or adjacent buildings. Usually, shading the lower portions only will be necessary.

Probably one of the best seeing conditions will be achieved through the combination of general lighting and a secondary system of illumination, providing direct lighting locally. While desirable, this will be limited by cost and satisfactory fixtures. Opportunity for this type of lighting seems to exist in laboratories in which a general illumination of about 8 to 10 foot candles might be maintained with local lighting augmenting it where needed for difficult seeing tasks, such as reading balances and operating delicate equipment. This would be similar to the lighting of card files usually found in libraries. It more or less automatically prevents the surrounding brightness from exceeding the light on the visual task. Obviously, such a method will be difficult in the ordinary classroom. In some of the activity type of rooms concentrated effort at difficult seeing tasks might be conducted in a portion of the room having this type of lighting. The less difficult seeing tasks could be conducted in areas of ordinary or general illumination. Discussion of such a system seems somewhat visionary in terms of the conditions so frequently found in which a single light fixture hangs from the center of the classroom ceiling.

In the absence of more definite help to achieve better lighting in what is commonly known as the standard classroom, artificial light will be necessary on the dark side of the room at all times. Indirect types of fixtures supplying 15 foot candles are recommended and for more difficult tasks a higher level will be necessary. From the foregoing discussion it will be obvious that shading, painting and other factors must be considered at the same time. Perhaps the best specification would limit the brightness of the ceiling and luminaire to 100 foot lamberts. This is only about 40 per cent of what most lighting specifications permit.

School districts would not entrust the design of building foundations or heating systems to those selling the concrete or radiators. So they should seek the solution of their lighting problems from those capable of supplying the same disinterested solution. Frequently, such services are unavailable but such a demand would stimulate trained men to enter this field. To date, most engineers making layouts have been electrical engineers not trained in the physiology and psychology of seeing. The engineering needs to be developed in terms of seeing conditions rather than in terms of mere electrical loads.

Shops

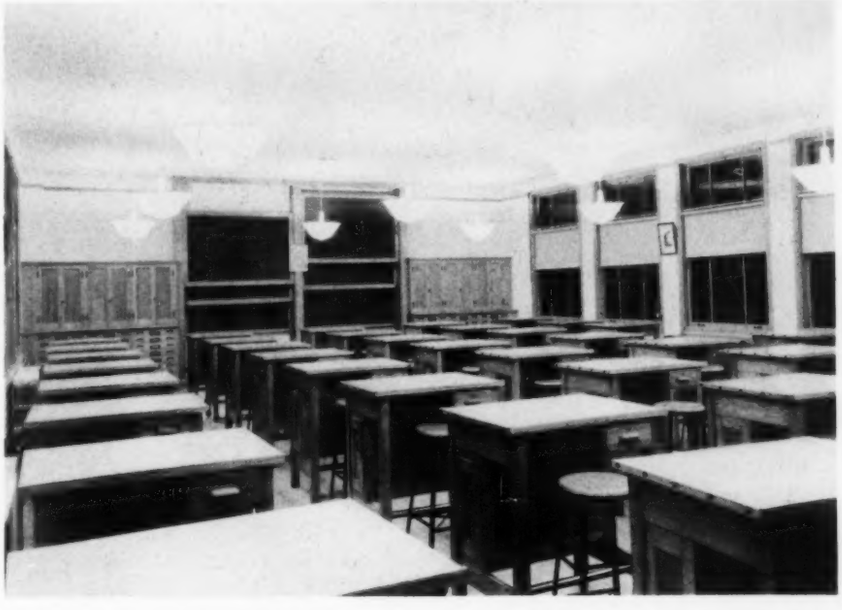
ELMER S. PIERCE
Principal, Seneca Vocational High School
Buffalo, N. Y.

THE sudden demand by industry for skilled mechanics and draftsmen has placed the vocational schools in a strategic position. Theirs is the responsibility for providing young workers with the rudiments of a trade so that they may more quickly be assimilated by specialized industries and for furnishing facilities for advanced training and supplementary training for men already employed but anxious to fit themselves for additional duties.

With no opportunity for enlargement of plant, educational authorities have turned to day and night operation in order to make the greatest possible use of existing facilities and to enable workers employed on various schedules to enroll for additional training. In such a program lighting plays an important part.

The relation between light and visual efficiency and rate of acquisition of this knowledge is not fully appreciated. A number of excellent experiments have proved this point. For example, carefully conducted tests in Cambridge, Mass., showed a 28 per cent gain in reading and a 10 per cent gain in over-all achievement attributable to modern lighting. In a three year test in an elementary school in Joplin, Mo., one of the most thoroughly organized and scientifically conducted researches of its kind showed a significant differential improvement in educational age when using the relatively moderate illumination levels recommended today. Calculated from the economic viewpoint alone, this gain in educational age was achieved at a cost of only 31 per cent of the money value of the saving in time.

The relationship between lighting and the visual and bodily health of human beings is likewise not fully appreciated. Improper lighting decreases the convergence reserve of the ocular muscles, thereby contributing to the strain of close vision. Nervous muscular tension and increase of blinking follow from inadequate illumination. Glare from lighting units and sharp reflections from work surfaces contribute to discomfort and interference with easy vision. The soft blending and balance of brightness in classrooms and workrooms in accordance with natural laws are violated with impunity in the interest of purely mechanical considerations.



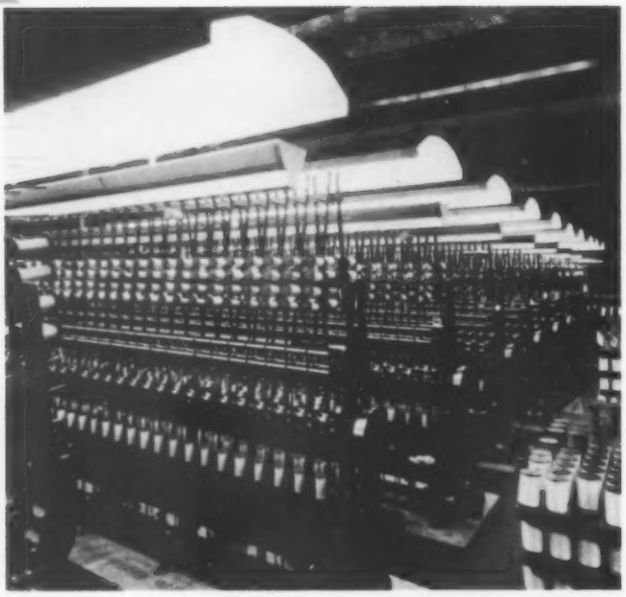
Above: Approximately 20 foot candles of general lighting furnished by silver bowl lamps in properly designed reflectors. Below: Approximately 40 foot candles of illumination furnished by proper semi-indirect luminaires.

Another important consideration is that proper illumination is stimulating. It gives a "lift" psychologically and physiologically that aids in teamwork, contributes to cleanliness, safety and discipline.

If these considerations are of importance to children and young adults in the ordinary course of education, they become doubly so in the situation in which we now find ourselves.

First is the necessity for speed. If we are to teach all that we can teach in the few weeks at our disposal, we should see that the visual highway is as free from obstruction as possible. This certainly means illumination according to modern standards.

Because much of our vocational instruction is confined to specific



Left: Literally miles of localized indirect lighting have been installed in factories. In this case the miniature ceiling is illuminated by lamps in the trough reflector suspended under it. Similar units of this type utilize silvered bowls.

Right: In this machine shop direct lighting is supplied by silvered bowl diffusers.

tasks, we should analyze those tasks to determine what the visual requirements are and how light can be applied to them. The Illuminating Engineering Society has for several years conducted investigations which supply specific answers and which, in addition, give us a method by which further determinations can be made. "The American Recommended Practice of School Lighting" and "Recommended Practice of Industrial Lighting," published by the Illuminating Engineering Society, should be carefully studied by every vocational school authority.

The second necessity is an appreciation of the age and physical and mental condition of our enrollment. As people become older the number who have visual deficiencies increases. In the group from 18 to 35 it is estimated that 35 per cent have defective vision. Most of the defects are of a type that are benefited greatly by proper illumination.

Consider, also, that many who attend our early evening and all night classes already have put in many hours of labor at other tasks. They are fatigued and do not have the response expected of rested pupils. Therefore, we have a definite responsibility to interpose no additional factors that, by intelligent preparation, could be eliminated. Proper illumination reduces eye fatigue and offsets to a marked degree the effects of bodily, mental and nerve fatigue.

At Seneca Vocational School we have lighted our shops in accordance with good modern practice. There is well-distributed general lighting of about 20 foot candles with no disturbing direct or reflected glare. Surroundings are well painted and cheerful. The addition of local lighting at some of the machines would aid in discriminating fine detail. Our drafting rooms, it must be confessed, are not up to standard. We are struggling along with glass enclosing globes giving only about 8 foot candles and both direct and reflected brightnesses disturb the pupils. I believe, as a result of a number of observations, that from 35 to 40 foot candles of indirect illumination is the best solution for school drafting rooms.

Certain experimental installations utilizing fluorescent tubes to make the ceiling an artificial skylight have brought enthusiastic response from draftsmen. It is, of course, an expensive type of installation. Providing from 85 to 100 foot candles in this manner would be of tremendous help in eliminating eyestrain but under the present emergency it does not seem wise for school authorities to wait for the ultimate, so to speak, when means are at hand economically to effect much needed improvement.

Libraries, classrooms and study halls, of course, require attention. Here much close eye work is done and the blackboards with their poor contrast after short periods of use should not be neglected.

In conclusion, I would urge careful study by educational authorities of the two I.E.S. publications mentioned previously. They are fundamental. Then, having an understanding of the basic principles and a knowledge of existing lighting conditions, call upon qualified illuminating engineers for specific studies and recommendations. Local utility and lamp company engineers have proved to be perfectly competent and reliable.

In addition to the scientific and humanitarian aspects of good illumination, let us not lose sight of the fact that if our pupils go out into industry and find that we are equal to or better than their employers in terms of basic knowledge, equipment and working conditions, vocational training gains in prestige, becomes a source of pride to those who have received its benefits and strengthens its position as a vital factor in training for manual skills.

PORTFOLIO

Gymnasiums

HAROLD W. COPP
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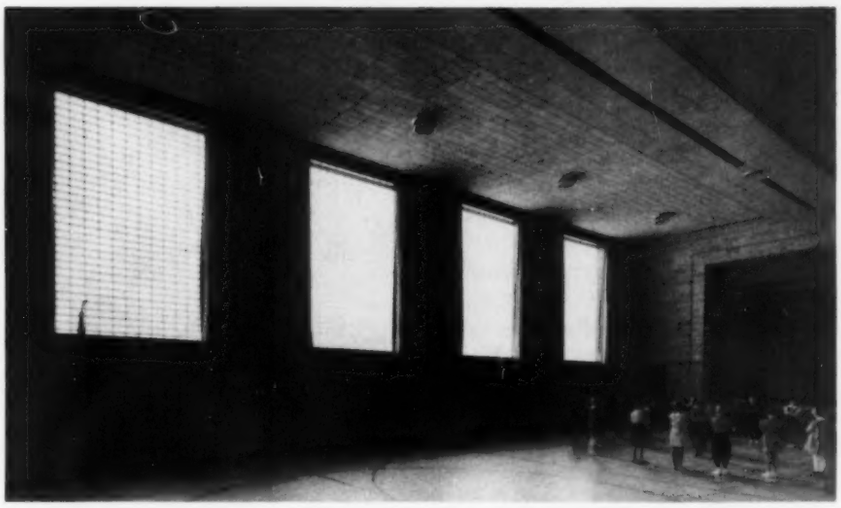
WITH the exception of the swimming pool and the auditorium, the gymnasium is the largest unit in the school to be lighted; in addition, this lighting must be adequate for an extensive program of games. There must be a large unobstructed floor space and considerable unobstructed overhead space. All parts need illumination because in physical education activity pupils move about to every nook and corner of the play space. The lighting must be adequate for seeing balls and other equipment passed, thrown and batted about the playroom. Therefore, it must be the very brightest and, insofar as possible, without shadows. Too, there is a period during the intramural or after-school program in which natural lighting becomes insufficient and the gymnasium must be completely illuminated by artificial lighting.

Windows occupy a large part of the wall space and extend, in some cases, from the ceiling to the floor as in the gymnasium of the Laboratory Schools, University of Chicago. At first, this arrangement was thought to be the answer to the lighting problem but it was soon found that it was difficult to arrange window shades to shut out the glare of the sun and to provide for proper screening against impact of balls and other play materials from the inside. In many cases in which the playgrounds were just outside the gymnasium, the problem of screening involved both the inside and outside of the windows. Since heavy mesh and strong casings are needed for the rough pounding to which screens are subjected, the result is a reduction of from 20 to 30 per cent in the amount of light admitted.

Even in connection with the window itself, economy of upkeep means that the panes of glass must be reasonably small. This means many mullions and, consequently, the shutting out of more light. In some cases, small panes of reenforced glass have supplanted screening in protecting the windows from breakage. These small panes are susceptible to breakage only under unusual conditions. There is an additional problem in many small schools in which the gymnasium is also used as an auditorium and in which it is necessary completely to darken the room for dramatics and moving pictures. Here opaque blinds are necessary and they, in turn, need troughs or channels along the sides in which the blinds can slide up and down. These troughs add to the difficulty by reducing the amount of lighting space.



Translucent glass block provides natural, diffused daylight in the gymnasium. The vacuum characteristics of the block assist in temperature control.

Two considerations complicate the use of screens. One is adequate provision for opening and closing the windows in connection with the open window ventilation. The second is proper provision for ease in removing screens so that windows can be cleaned. In many schools, years rather than months elapse between the periods when windows are cleaned because of the extra labor involved in removing the screens.

So far we have discussed the gymnasium lighting from the point of view of the participant. However, spectators present peculiar needs also. Changes made in the type of bleacher seats in gymnasium construction have eliminated pillars and some supports to apparatus and equipment. In many places this year the new streamlined basketball backboards are optional for contests and allow spectators, particularly in the end zone seats, a markedly improved view of games. Other changes in the lighting activities, however, have been even greater from the spectator's viewpoint.

The use of floodlights and spotlights in such contests as boxing and wrestling has been of great help to the spectators in seeing what is going on. Better equipment for special sports has aided also. The lightweight posts used as supports for badminton nets, such devices as the electric light signal attached to the basketball goals and the electric foils used in fencing, all add interest to the contest.

Much has been learned about care and treatment of floors in recent decades.* Dark tile and composition floors present special problems in lighting but, fortunately, they represent the minority of floors for gymnasium use. With modern treatment of wooden floors it is now possible to obtain and to maintain a natural gloss finish which will preserve the brilliance of court markings and which is easily kept clean. In addition to this, the finish is definitely not slippery. It has taken school administrators many years to forego the pleasure of seeing a glossy finish on a varnished desk and other schoolroom furniture and to tolerate dull finishes that aid in the conservation of eyesight. Probably administrators of health and physical edu-

*Copp, Harold W.: Care of Gymnasium Floors, Jour. of Health and Phys. Ed., February 1938.

cation, having obtained satisfactory floor finishes, will also make an attempt to eliminate glare.

In the classroom it is feasible to use light tints that help materially in stepping up the light, particularly in those areas above the reach of pupils' hands. In the gymnasium, the use of light tints is not so feasible because of the defacing that results from balls and other playing equipment. In general, the trend is toward lighter or better light-reflecting colors for walls and ceilings. When consideration has been given to the advantage of light walls, special materials have been used. This is the case in the gymnasium of the recreation center at Lovett Hall, Dearborn, Mich., where the gymnasium walls are faced with a light colored tile.

Tile is used freely in the construction of swimming pools. However, attempts to take motion pictures of swimming and diving have taught us much about the inadequacies of lighting in swimming pools. In swimming pools attempts have been made to light the water rather than the area over the water. It is probable that fluorescent lighting will be used successfully in these situations long before it will bring about much improvement in the lighting of our gymnasiums. At the present time, the largest fluorescent 100 watt fixture unit is about 2 inches in diameter and 5 feet long. Fluorescent light may be produced in several spectral colors and the 100 watt unit in some colors will probably deliver about as many foot candles as 200 watt incandescent. However, the size and shape and maintenance features of the fixtures will not allow them to be used in places in which illumination has to penetrate such long distances or great areas as are found on a basketball court. Experiments with fluorescent lighting are still in an embryo stage, however, and we must not be too quick to judge the limitations of its possibilities.

Attempts to take motion pictures of ice skating and ice hockey also showed inadequate lighting. Experimentation resulted in the discovery that if white paint was sprayed on the ice before the top layer was added. he effect was an improve

This library is lighted with 40 watt semi-indirect fluorescent luminaires.

ment in lighting from the standpoint of the player, the performer and the spectator.

Most rapid advance has been made in the field of outdoor lighting and physical education. So successful have been advances in this field that spectators take it for granted that they can attend baseball games in the evening and see without difficulty a fly ball or detailed play about a base. Many athletic contests are easier to watch under lights because of the lack of distraction in the form of a dark sky curtain and no back lighting. In football white pigskin reflects the light and makes the play easier to follow. Although lights are prone to reflect disturbing glare in the case of fog, surface conditions in outdoor sports are much more of a problem at the present time than is lighting.

In some activities, such as skiing and tobogganning, the gala effect is an additional advantage.

Outdoor lighting has its limitations, however, and although nothing can match the grace and beauty of a sailboat hoving into the range of a floodlighted area on a waterfront, it is still not practical adequately to light large, deep bodies of water for safety in swimming and diving or for canoeing and boating.

Problems relative to gymnasium, swimming pools and outdoor sports have been dealt with briefly. In many other respects health and physical education depend upon lighting as a crutch to successful execution. Score boards, time clocks and improved lighting of shower rooms, locker rooms and equipment rooms, all testify to the importance of illumination in the success of physical education programs.

As mentioned previously, construction involving the size and shape of windows has taken many excursions into sky lighting, dormitory windows and attempts to get better types of glass. Besides obtaining translucency without transparency by such innovations as pebbled, frosted, pyramid ridged, sanded and reenforced glass, attempts have been made to admit therapeutic values of sunlight by the use of quartz glass. Frequently glass brick has been used liberally.

In the recently built field house, 172 by 334 feet, at Michigan State College, East Lansing, the two end walls and one side wall contain 25 glass block windows representing a total natural lighting area of approximately 6000 square feet. The glass blocks are constructed so that those in the upper area of the windows catch the early morning and late afternoon light and reflect it to the floor of the building.

Glass brick thus aids in the solution of the lighting problem through better use of natural lighting. The physical education program is extended and there is greater leisure for play and physical activity. Improved incandescent lighting makes for better conditions for participation and specialized problems may even yet draw heavily upon mercury vapor, fluorescent or even sodium lighting.

Libraries

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University of Minnesota

THE importance of hygienic lighting in the school library is obvious. Surveys, as well as casual observation, frequently reveal (1) marked deficiencies in brightness of illumination and (2) presence of glare.

In the ordinary reading situation, such as in the school library, the color of light is unimportant. Whether the light comes from tungsten filament, sodium vapor, mercury or fluorescent daylight lamps, with their corresponding variations in color of light, the effects are the same provided that other conditions, such as intensity and distribution of the light, are constant.

A survey of certain experimental reports reveals that the critical level for effective vision in reading the ordinary sized print found in most school books (from 10 to 12 point type) falls below 10 foot candles, usually in the neighborhood of 4 foot candles.[1] The critical level measures the illumination intensity above which further increases in brightness produce no further improvement in performance and no additional decrease in visual fatigue. When the visual task is more exacting, as when reading print of less than optimal legibility, the critical level for efficient vision lies between 8 and 10 foot candles. In those situations in which fine discrimination is required the critical level appears to be near 20 foot candles.

Maintain a Safe Margin

It is reasonable to assume that the brightness of light for hygienic vision should be maintained above the critical levels in order to maintain a margin of safety. For instance, in 1931 the International Commission on Illumination recommended that the minimum intensity of light in schoolrooms should be set at 8 foot candles.

For reading the 10 to 12 point type of schoolbooks, evidence suggests that there should be 10 to 15 foot candles of light at the reading surface in school libraries. This will furnish a satisfactory margin of safety above the critical level of illumination cited in the preceding paragraph. If no glare, resulting from faulty distribution of light or factors, is present, higher intensities may be employed with safety but without gain in efficiency and comfort for the normal eye. There should be, however, at least one table in the school library with brighter illumination. When a child has defective eyes or when the visual task is exacting, as in reading print of marked illegibility, it is desirable to have an illumination intensity of from 20 to 25 foot candles.

Diffusion Must Be Correct

Adequate control of the distribution of illumination throughout the reading situation is of importance. This factor must be coordinated with intensity. A frequent cause of eyestrain is an unsatisfactory diffusion of reading light, producing glare of various forms.

One kind of glare results from peripheral spots of illumination either to one side or slightly above the eyes. Such glare frequently comes from fixtures that hang too low from the ceiling or are attached to the wall of the reading room.

Visual fatigue is frequently caused by the highly polished surfaces of library tables which, like mirrors, reflect light into the reader's eyes. All tables and desks in the school library, therefore, should have dull surfaces even though some beauty is sacrificed.

Another fatiguing type of glare is due to brightness contrast within the visual field, especially on the immediate working surface, such as the reading table in a library. The sharper the division between bright areas and shadows or dimly lighted areas the greater the eyestrain resulting from the constant adaptation as the eyes move from place to place on one's work. To avoid this strain there should be uniform illumination over the library tables. Furthermore, in order to avoid sharp contrast between paper and the table surface, the surface of the table should be a light neutral tint rather than a dark color.

The finish of the walls and ceiling of the school library is important since a considerable amount of the light received is reflected back into the room if proper paint is used. Ivory or light cream colors are usually preferred because of their high reflection factors.

Indirect lighting fixtures yield highly satisfactory illumination for reading provided that the ceilings and walls are properly painted and the fixtures are at a proper distance from the ceiling. Another effective type of lighting is furnished by the recently developed fluorescent lamps, if properly installed. Indirect lighting is costly in power consumption and the fluorescent lamps involve expensive installations. In the ordinary school library it is practical, therefore, to employ a fixture that is a compromise between the direct and indirect types and is not too expensive. Such a fixture consists of a porcelain globe enclosing the light bulb. The fixture should hang below the ceiling but it should be high enough from the floor so that it is out of the field of vision of the pupils working at tables. With this type of fixture part of the light, dispersed in passing through the globe, travels directly to the working surface and part goes to the ceiling and walls and is then reflected throughout the room. The fixtures should be so installed that those farthest from the windows can be turned on first.

Table Lighting Adds Intensity

Adequate intensity of light with satisfactory diffusion is most economically achieved through a combination of moderately bright general illumination plus local lighting at the reading tables or other working areas. If permanent table fixtures with opaque shades are used, as in many libraries, a more diffused illumination at the reading surface is obtained by incandescent tube lamps in table fixtures rather than from ordinary spherical bulbs because the former are long and rodlike and yield a fairly well-diffused light. If portable table lamps are employed, the I.E.S. certified lamps are highly satisfactory, whereas the goose-neck type of table lamp is particularly bad and should be avoided.

[1]Tinker, M. A.: Illumination Standards for Effective and Comfortable Vision, J. Consult. Psychol. 3:11, 1939.

Offices and Corridors

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Director of School Building Service
Missouri Department of Public Schools

WHILE many studies have been made on lighting practices and illuminating standards for classrooms and libraries during the past few years, little attention has been given to school office and corridor lighting. The American Standards Association adopted a minimum standard of 1 foot candle of illumination for stairways and corridors in 1924. This minimum standard was increased to 2 foot candles in 1932 and to 4 foot candles in 1938. This association also approved in 1938 fifteen foot candles on desks as a minimum standard for the lighting of offices.

The dearth of reported studies on school office and corridor lighting leads to the conclusion that the proposed minimum standards were, at least in part, determined primarily on the basis of opinion. The importance of adequate illumination and a lack of unanimity on methods of obtaining this illumination seem to warrant additional studies of standards of illumination and lighting practices for school office, stairway and corridor units. In the following discussion any proposed standards represent my opinion rather than the results of controlled tests and studies.

The modern school office is the heart of activities in that building. It is a workshop in which plans are developed and school records are tabulated. It also serves as a conference room for school officials and visitors having business at the school. Because of the varied activities carried on in the office it is doubtful if any one standard of illumination will be satisfactory for all parts of the office. Stenographic work and record tabulation may require the equivalent of 25 to 30 foot candles of illumination, while consultation desks or waiting rooms may need much less light.

Correct lighting for the administrative unit should provide an even glow over the whole room. There should be sufficient illumination to give a cheerful atmosphere and to aid in making the room attractive.

There are three general plans used in office lighting. Local lighting, which provides a light at each working station with dark areas between, requires frequent eye adjustment

Above: Office lighted with recessed fluorescent fixtures that provide an even glow of light.

and leads to eyestrain and early fatigue. General overhead lighting may help make an attractive room. However, excess illumination must be provided for a part of the room in order to obtain the intensity desired at certain working stations. A plan sometimes known as "general lighting plus" provides ample general illumination to give the effect desired over the whole room. Smaller lamps are installed to provide added intensities where needed at certain working stations.

In many cases it is necessary to install new fixtures in order to produce the lighting effects desired. The use of indirect or semidirect fixtures for the general illumination may provide a soft light over the whole room. Some school officials have obtained satisfying results by installing two or more ceiling reflecting floor lamps in corners of the rooms. These aid in providing an attractive room but some school office ceilings are so high that the average floor lamp is not fully effective. Adequate illumination and attractiveness may be obtained by use of some of the newer fluorescent luminaires.

One of the chief purposes of corridor and stairway illumination is to aid in promoting rapid, orderly and safe pupil traffic in the building. Available information indicates that about 20 per cent of all reported school building accidents in 1940 occurred in corridors and on stairways. The number of corridor and stairway accidents from tripping, slipping and running into sharp corners of cases and doors can be reduced by adequate lighting. It is true that increased illumination may add to the cost of electric current. However, it may be cheaper to pay the light bill than to pay for accident injuries.

Many school officials feel that the resulting reduction of corridor disciplinary problems and the saving of time spent in corridor travel more than compensate for the cost of the added electric current consumed.

In planning the lighting system for corridors and stairways the following features should be considered.

Entrances should be well lighted. Rapid transition from outside daylight to poorly lighted lobbies may lead to tripping and stumbling on stairs or steps.

Light should be ample at all points and should be well diffused. Probably no single foot candle standard of illumination will be satisfactory. Certain lobbies may need as much as 15 to 20 foot candles of illumination. Ample light should be provided for all stairs and around lockers and trophy cases. Glare and excessive contrast from alternate bright and dark spots should be avoided. Shadows should be eliminated.

Control switches should be located so that lights may be controlled from each of several points. The use of gang and multiple switches permits better control of the current used.

The semidirect fixture attached to the ceiling or suspended about 2½ feet below the ceiling is probably used more than any other for school corridor lighting. In this case illumination is provided but some glare and the alternate bright and dark spots detract from the beauty of the corridor. Many schools have installed fluorescent fixtures in order to provide the illumination desired in lobbies and corridors with a minimum consumption of electric current.

Upon Retiring Gracefully

JAMES H. HARRIS

Superintendent Emeritus, Pontiac, Mich.

CONSIDERING the thousands of superintendents of schools in the United States, the number arriving at the point at which they may be designated as "superintendent emeritus" is exceedingly small.

For the most part school superintendents are officially decapitated long before they reach the age of 70, or whatever age is determined upon as the age of retirement. Even the few who survive the ordeal of the years are usually retired "without a trace."

It was my good fortune to continue in active service somewhat beyond the age of 70. That is an ample record and, in justice to myself, the school system and the opportunities for promotion that should be open to younger men, I felt that I should retire.

The board of education of Pontiac kindly conferred upon me the title of superintendent emeritus in recognition of my long service, and that is now the rôle I am enacting (if rôle it is) in the city in which I have long lived.

Now for a look at my job as a superintendent emeritus. The reader may rightly wonder about this because his first thought naturally is that an emeritus has no job. His task is simply to enjoy his leisure or at least to occupy it as best he can. The fact remains that a superintendent emeritus has a job and a real one, especially if he continues to live in the town or city in which his service has been rendered.

Forgetting What Is Behind

His main job, as I have learned since I have assumed the part, is to adjust his mind and his activities as rapidly as possible and as intelligently as possible to the new situation in which he finds himself. The first step in the process of adjustment is the mental one of forgetting; forgetting that he has been superintendent; forgetting that he has any further responsibilities with reference to the policies or administration of the schools; forgetting to gossip about what is going on in the schools even with the teachers who have been closely associated with him during his period of service; forgetting to be sensitive about changes in policy or administration that may run counter to his policies or procedures.

A superintendent emeritus has a job and a real one, especially if he continues to reside in the city in which his services have been given. His main job is that of forgetting his former place in the sun and in turning his mental and physical energies to his own personal interests

St. Paul's phrase, "Forgetting the things which are behind," should be of vital concern to all retiring superintendents.

It is neither an intelligent nor a happy adjustment to their own situation, nor is it fair to their successor, to pursue any other course. "Forget it" may be cheap vernacular but it has a world of sound philosophy in it. You are no longer superintendent of schools; accept it, and forget it. Give your successor all freedom and loyalty.

The second adjustment that a retiring superintendent must make, particularly if he is retiring for age and has closed his career, is to recognize that he is no longer publicly important in the sense that he formerly was.

To one who has been in the limelight for many years, who has seen his name in the papers as speaking at this or that school or civic function, who has represented the schools on this committee or the other, who by virtue of his office has been called upon for services of all sorts and kinds, who has been catered to and flattered by his teachers, who—in short—has become accustomed to looking on himself as a fairly important figure in the public eye, it comes as something of a surprise, if not a shock, to find himself suddenly thrust into relative obscurity.

It is not always easy to effect this adjustment and many retired superintendents make a mess of it. They miss the publicity and do not reconcile themselves to a state of unimportance. It is essential, however, for his own and his friends' happiness that a man make this adjustment as quickly and as graciously as possible. The desire to be important is one of the most powerful of incentives. It is not easy, even when one has presumably finished his active career and has achieved whatever importance the nature of his occupation or the circumstances of his life permit, to subdue this instinct.

It should be his aim, however, if he is still under the importance urge, to transfer it to some other activity besides that in which he has been previously engaged. This is, of course, a rare and unusual achievement, but it may be done. Better is it, however, to accept the inevitable; be content with whatever importance your previous record and opportunities have given you, and let it go at that.

Reaction May Be Disastrous

The third necessary adjustment springs from the feeling that will inevitably come, that your usefulness is at end and that you have joined the ranks of the useless. You seem at least to yourself no longer a useful member of society. Your work, you feel, is done and the sooner the last chapter is closed the better. These feelings may be merely passing moods but, unless they are watched and countered, they may tend to habituation and a permanent mood. That may prove disastrous.

In this natural reaction to a life of activity, it seems to me that one must formulate a new definition of the words "usefulness" and "uselessness." Is one really useless just be-

cause he has ceased to be in active work? Is his usefulness, as a matter of necessity, at an end? Well, that depends on what one means by usefulness. One assumes that he is useful just because he is at work and busy; that he is not useful if he is unoccupied and relatively idle.

A study of that theory will, however, disclose that it is not altogether true. Many a person who is now engaged in work or activity of some sort would be far more useful if he were idle. He is bungling his work, perhaps; he is engaged in some enterprise that is harmful to society; he is busy at something distinctly not worth while; he is really a liability, not an asset, even though he is at work.

On the other hand, the man who is seemingly doing nothing may be quietly exercising an influence that is of high value. One may be as useful simply doing apparently trivial things, provided he is at the same time being something, as if he were tremendously busy doing something not worth while, or possibly doing something in itself worth while in a fumbling and inefficient manner.

It may be assumed that when one reaches the retirement age his usefulness in that particular capacity is at an end. To continue longer would be only emphasizing his uselessness and obstructing progress. He is more useful out than in. That does not mean, however, that he has become utterly useless. Even if he is seemingly doing nothing, he is, if he has been the right kind of a man, still exercising a remote but nonetheless effective influence on the lives of those whom he has touched during the years.

A fourth job of a superintendent emeritus or one who is retired is to substitute some new interest for the old. If it is not possible, that is just too bad!

Whether he can make the substitution depends largely on whether he has anticipated the possibility of a retirement period and has prepared himself to meet the conditions that will make of it at least a measurable success. To this end every superintendent in active life should cultivate some reserve interest that will serve as an escape mechanism when the responsibilities of active life are laid aside. This advice, of course, is applicable to all vocations, but as I am now writing to and for school superintendents, I confine my observations to them.

It is essential as one wends his way through life to develop some side interest, some hobby if you will, that will be a place of refuge and a source of interest when the period of retirement comes. It may be a farm; it may be a business; it may be travel; it may be golf. It may be some hobby, such as wood carving, in which a friend of mine has become something of an artist; stamp or coin collecting; some scientific interest, like geology, astronomy, botany.

One of the main jobs of a superintendent emeritus, therefore, is to occupy his time and effort (assuming he is in reasonably good health) in some satisfying way. So, a superintendent emeritus does have a job, after all, and it needs to be exercised with tact and intelligence.

Can Textbooks Teach Philosophy?

WILLIAM KESSELMAN

Teacher, Milwaukee Public Schools

BEFORE the founding fathers could write instruments of freedom, they had to have cherished philosophies. The Declaration of Independence, the Constitution and the Bill of Rights are tangible evidence of their philosophies. They understood these philosophies because they made them realistic and acted on them. If Americans are to continue our democratic traditions, they, too, must have a philosophy of life. Are our children getting it?

For some years, we have had a constant flow of books on educational philosophy. Many teachers, after extensive reading of these and study under their authors, have developed brilliant philosophies of education; but are they able to produce workable philosophies of life in the child? Some educators are doubtful.

Concurrent with the definition and development of educational philosophies has been the movement to prepare teaching materials in keeping with these suggested philosophies. In fact, the preparation of materials has become an almost exact science.

Some teachers are discovering that it takes more than a philosophy of education and a good author and teacher to prepare effective teaching materials. A book based on a philosophy of education frequently forgets to present the basis from which a child can develop a philosophy of life. It frequently fails to help the child evaluate his "here and now" on which he can build a democratic philosophy of life.

To illustrate, many courses of study include the teaching of cooperation. The textbooks and the teachers present the subject by rehearsing in one way or another the successes and sometimes the failures of the movement in Denmark, Sweden, Norway, England and America. Can such a rehearsal develop the following philosophy of cooperation:

1. A firm belief that the best way of solving problems is through group participation.

2. The thought that "There is he that scattereth yet increaseth; there is he that withholdeth more than is proper, yet he tendeth to poverty."

3. A full recognition that cooperative activity harmonizes self-interest with social interest.

4. Learning to cherish the ideal of producing goods and services not only for his own good but for social good.

5. Recognizing the thought from James 1:22, "Be ye doers of the word and not only hearers, thereby deceiving yourself."

It is apparent, therefore, that cooperation, like any other democratic activity, cannot be taught from a textbook or other materials that simply rehearse successes and failures but must be taught from materials with a philosophy of the "here and now."

Textbooks in the future will have to take children's activities and build into them a philosophy, the subject matter being close enough to the child. Curriculum materials which are not related to the "here and now" of the child and his environment do not produce the philosophy of life essential to democratic progress.

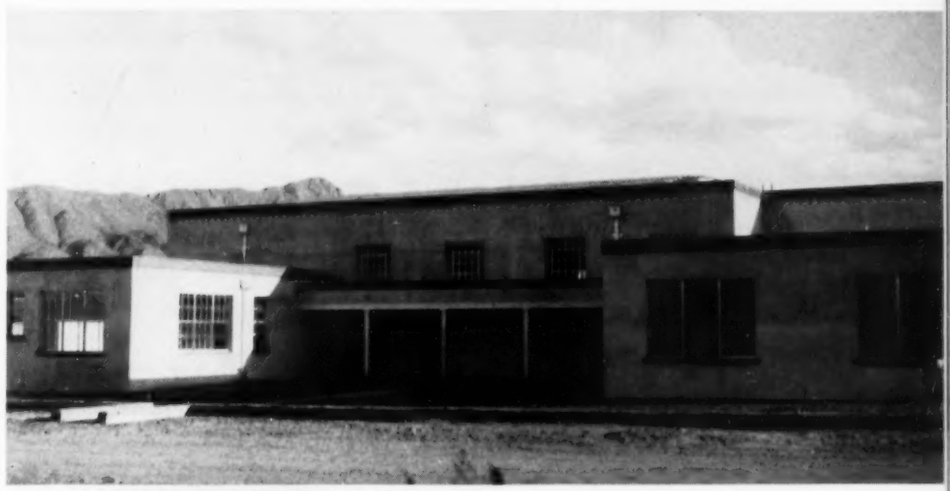
This is a problem and it must be faced. What are our textbook writers going to do about it?

HOME ECONOMICS COTTAGE, HOT SPRINGS, N. M.

W. S. STUART
High School Principal

HELEN SOLADAY
Home Economics Instructor

THE home economics cottage at Hot Springs, N. M., occupies one wing of a new $102,000 auditorium-gymnasium-vocational building, which is a unit of the Hot Springs High School. Of the total cost of the building, $30,000 was raised by district school bonds and $72,000 was provided by W.P.A. The building was designed by Kruger and Clark, Santa Fe, N. M.



Above: The new addition to Hot Springs High School. On the right is the home economics cottage. On the left are the offices of the superintendent and board of education. The center room is the auditorium-gymnasium. The building also houses the vocational carpentry, industrial arts, journalism, art, crafts and music departments. Left: A "family" in the beginning home economics class eats in the breakfast nook, which is in one corner of the kitchen. The bedroom is furnished with a bed, dresser and chair of Spanish Colonial design, which were built by the woodworking class of the high school as was much of the furniture with which the cottage is furnished.

Above: A home economics pupil spending time between classes reading in the living room, which is nicely furnished in the Spanish Colonial style of décor.

Cottage floor plan showing large living room, kitchen, bedroom and bathroom.

Chalk Dust

CONSIDER the athletic coach in the springtime. There is much leaping and running about and other exercitation in the school. The disci must be polished, the javelins must be oiled and sundry preparations made for feats of strength to come. The baseball team demands linimentation and the shell holes in the cinder track must be ashed. Meanwhile, the herders who mount the soda stools in the drugstore call vociferously for action.

Spring fever fills the air. The principal calls the coach on the linoleum and says, "Character before victory, my boy, but get busy. The members of the board of education say character before victory, my boy, but we want a winning team. An editorial in the local paper says character before victory, my boy, and you'd better do better than you did last year or else."

The athletic coach is heartened with these fine sentiments and clips them for his scrapbook. One day there is a balminess in the air, the next it rains and the next it snows. The baseball team loses. The javelin pierces sundry small fry who are running about on the athletic field and the 10 pound shot, thrown wildly, hits the coach on the cranium but with no apparent damage.

At long last, however, the tennis team comes through with a victory and so to June.

● ●

Spring Song

Comes now the merry month of May
The sunshine and the flowers;
Heigh, ho, 'tis May! The world is gay
With lazy golden hours.

But hold it! After May comes June when worry fills the air, examinations coming soon and gloom spread everywhere. For June's the jolly time of year when kids are extra-dumb, and will you be so full of cheer when pay checks cease to come? And, then, there's graduation with its problems by the score, with its general condemnation and some fifty parents sore. What about the cousins who are waiting to be hired and the teachers by the dozens whom the board says must be fired?

A roundelay we sing to May
Whose sweetness fills the air;
Our cares and worries drop away
With laughter everywhere.

But look! are your supplies on hand? Are bids in for the coal? And who is going to lead the band and guard the Scout Patrol? And is your budget finished for the year that looms ahead, or has the cash diminished so the school is in the red? Have classrooms been allotted for the usual overflow? Have the schedules all been plotted with due punctilio? And must we keep repeating: What are you going to do? For you got to keep on eating even after school is through.

The snappy, happy month of May
Spring's gracious olio;
'Tis time to cast dull care away
A fishing we will go.

Going a fishing, are you? What a pleasant wish! Well, among folks hereabouts you ain't caught much fish. How can So-Important You ever get away, with so many things to do and so much to say? Ought to patch the roof, it's true, ere the fall winds come. There is patching yet to do on your curriculum. And the family flivver is full of aches and ills; watch that funny shiver, brother, watch those nasty hills.

Away with worry, what the—well,
What troubles dare gainsay
That all is well? The world is swell,
Heigh, ho, my boys, 'tis May!

● ●

Dear Superintendent

DEAR SUPERINTENDENT: The inspection of the schools made by the Committee on Ways and Means of Retrenchment was done last Saturday in your absence and we will be pleased to present a favorable report to our association at the next meeting. You have shown a commendable regard for the public purse which cannot be praised too highly. We would like, however, to point out a few items which should have your attention. Some of the wall maps of Europe and Asia, which according to the accession book were purchased in 1912, are beginning to show signs of finger marks and wear. They should be mended as soon as possible. We note, too, in the machine shop there are several machines dated 1900 which ought to be fixed up. On the whole, however, you are to be complimented on the care which you have given these materials of instruction.

Personality Difficulties

Does Your School Cause or Cure Them?

CHARLES L. WORTH
Supervising Principal, Lambertville, N. J.

MANY schools, in assuming more and more responsibility for society's children, are becoming aware of the necessity for scrutinizing the entire educational program more closely in an effort to replace emphasis upon those things that are found to be essential to the mental and physical well-being of each individual pupil. However, there are thousands of classrooms in which, singly or in combination, school administrators, teachers, programs of studies and physical environment present conditions that lead to unwholesome, maladjusted personalities in young people.

Mental and social maladjustments cause tremendous human waste and suffering in the United States each year.[1] Recent surveys by a large life insurance company indicate that nervous and mental diseases constitute 12 per cent of all the illnesses reported. In 1933 our mental hospitals cared for a daily average of 383,000 patients, or about the same number as were treated in other hospitals for all kinds of disability combined. It has been estimated that in the state of New York one person in 22 becomes a patient in a mental hospital during a single generation and that of the 2,020,000 children in the public schools of the same state in 1927 about 95,500 probably would require treatment in a mental hospital at some time during their lives.

With this evidence and some knowledge of the causes of maladjustment a "total war" ought soon to be prosecuted to recondition our educational philosophies and practices in accordance with mental hygiene.

It is believed by many and said well by L. F. Shaffer that the aims of education and of mental hygiene should be the same, namely, the development and training of the individual for effective living in his social environment.[2]

St. Louis Public Schools

Negative behavior is regarded by psychologists as more serious than positive.

Popular opinion and the judgments of educational philosophers unite in recognizing that the most important outcomes of education are the general habits and attitudes that make the individual better able to attack his life problems rather than the specific skills and bits of information that he acquires. The responsibility of the school is not limited to intellectual training. The child comes to school as a whole and it is impossible to separate his intellectual functions from his motives, emotions and social adjustments. This is especially true in modern education.

In 1922 C. Floyd Haviland said that when an adequate mental hygiene program for the school period shall have become fully effective, it is certain that there will be a great diminution in the number of mental hygiene needs arising subsequent to school life.[3] Unfortunately, it is needless to say that the school program has barely been undertaken and the mental hygiene needs of the adult population remain many and varied. It has been clearly pointed out that if the largest results theoretically possible in the mental hygiene field are to be obtained, the potential sufferer must be reached in childhood, long before psychotic symptoms develop. Nevertheless, we have as yet, by and large, neglected the opportunity thus presented. The result is that we are left to work on the problem in its difficult phases, when character and habits have been fairly definitely formed.

In fact, there is evidence that not only do the schools fail to contribute all they are capable of contributing to successful personality adjustment but they actually contribute much to personality difficulties of their pupils.[4] Misplacement and failure in school or the demands of a school

[1]Fifteenth Yearbook, Department of Elementary School Principals, Washington, D. C., National Education Association, 1936, p. 386.

[2]Shaffer, Laurance F.: The Psychology of Adjustment, New York City, Houghton Mifflin Company, 1936.

[3]Haviland, C. Floyd: Mental Hygiene Needs Arising Subsequent to School Life, New York City, National Committee for Mental Hygiene, Inc., 1922.

[4]Bassett, Clara: The School and Mental Health, New York City, Commonwealth Fund, 1931.

program unsuited to the needs and abilities of individual children often result in general nervous tension, restlessness, vague fears, stuttering, a chronic psychological mood of depression, a keen sense of failure and unworthiness and habits of failure that are likely to handicap the child for life.

Uniform lesson assignments, a horse race type of competition for high grades, report cards showing the relative place of the runners-up in the race, promotion by battalions, the accumulation of credits to meet requirements, blanket testing to determine the efficiency of teachers according to the number of children reaching grade standards, and XYZ groupings—if these practices were not familiar and universal, we might better see their barbarity.[5]

These practices undertake to make the child adjust to the school. They set up frustrations that injure the mental health of children and force teachers to disregard individual needs. They undermine security and self-respect, deprive children of learning for its own sake, set up habits of failure or of too easy success, warp personalities, limit the development of talents and incite to undesirable behavior, truancy or even delinquency, whereupon there is a call for "pupil adjustment."

Practice Lags Behind Science

Although there is general agreement that there are schools that are making a definite contribution to personality adjustment too often their practices in overcoming the serious problem lag far behind the scientific knowledge that the child guidance specialists have accumulated in recent years.[6] This is particularly significant if we accept the thesis that the teacher's highest function consists in the development of an agreeable, liberated, concordant, dynamic personality. This supreme function cannot be accomplished in disregard of the principles of mental hygiene.

In response to a questionnaire recently submitted to superintendents in representative cities of the United States, a number of superintendents indicated that many teachers had received college training in mental hygiene.[7] It was also pointed out by several that the teachers' colleges and normal schools are devoting time to the study of adjustment problems in children. The larger cities sponsor in-service training in mental hygiene for teachers.

Most of the superintendents reported that there is no attempt to teach mental hygiene, as such, to pupils in grades 5 to 12 in their school systems. However, the majority believed that principles of mental hygiene should be taught, in simple form, in the junior and senior high schools. In Los Angeles high schools, two courses are offered, social problems and family arts, for the purpose of presenting the principles of mental health.

Most of the superintendents expressed the opinion that promotion and retardation involve serious problems of mental health. Nearly all believed that classroom teaching typified by Burnham's "a task, a plan; freedom" idea, as contrasted with entire teacher direction, would greatly aid young people in their personality adjustment problems.

At this point some explanation of personality maladjustment may be of value. Individuals who are unable to adjust themselves to the world at large with a maximum of effectiveness, cheerfulness and socially considerate behavior and who are unable to accept and face realities are suffering from maladjustment.

Evidences of personality problems are not limited to those forms of behavior frequently subsumed under certain captions.[8] Withdrawal, shyness, suspicion, unhappiness and the like are commonly spoken of as personality problems. These are all ways of avoiding facing the difficulties in life and, therefore, reflect inadequate personality integration.

But, on the other hand, aggressively antisocial children (whose behavior is frequently spoken of as a conduct problem) may be behaving in the socially unacceptable way only to compensate for or cover up a serious lack of personality integration. Either the withdrawings or the aggressive type of behavior may interfere with school achievement and may lead the observer to judge that the child is of subnormal mental ability. Thus, practically any type of problem behavior to which human children are heir may be indicative of personality disorders.

Ackerson, who reported a study of 5000 problem children, indicated that they were suffering from one or more of 478 different personality difficulties.[9] The 17 commoner symptoms were the following: (1) restlessness, irritable temperament; (2) disobedience, incorrigibility; (3) retardation in school; (4) temper display, "tantrums"; (5) listlessness, lack of initiative or ambition; (6) stealing; (7) immature manner of judgment, impaired judgment; (8) fighting, quarrelsomeness, violence; (9) enuresis beyond third birthday; (10) lying; (11) poor work in school; (12) crying easily; (13) masturbation; (14) truancy from school; (15) truancy from home; (16) sensitiveness and worry; (17) bashfulness, shyness.

Diverse Opinions of Behavior

There is a divergence of opinion as to the relative seriousness of certain symptoms of maladjustment. Probably the best known study of adult attitudes with respect to the seriousness of children's behavior is that by Wickman.[10] City teachers rated as most serious such positive behavior as stealing, heterosexual activity, untruthfulness, writing obscene notes and pictures, destroying school materials, truancy, impertinence, disobedience, profanity and smoking. The mental hygienists, on the other hand, gave the highest average ratings to negative behavior, such as unsocial withdrawing, unhappy attitudes, fearfulness, sensitiveness, suspiciousness, shyness and being overcritical of others.

Fears, suspiciousness, excessive modesty, shyness, day-dreaming and spending most of one's time reading were considered as serious by some specialists in a study conducted by Stogdill.[11]

(To be concluded in June)

[5]Munson, Grace: Adjustment Service, Chicago Schools, Educational Method **19**:327 (March) 1940.

[6]Wallin, J. E. Wallace: Personality Maladjustments and Mental Hygiene, New York City, McGraw-Hill Company, 1935.

[7]Worth, Charles L.: School Practices in Mental Hygiene Questionnaire (March) 1940.

[8]Witty, Paul; Skinner, C. E., and others: Mental Hygiene in Modern Education, New York City, Farrar and Rhinehart, Inc., 1939.

[9]Ackerson, Luton: Children's Behavior Problems, University of Chicago Press, 1931.

[10]Wickman, E. K.: Children's Behavior and Teacher's Attitudes, New York City, Commonwealth Fund, 1928.

[11]Fifteenth Yearbook, Department of Elementary School Principals, Washington, D. C., National Education Association, 1936, p. 592.

Excursions Are Often Hazardous

MADALINE KINTER REMMLEIN

Staff Member, Research Division, N.E.A.

THE number of pupils injured on excursions of one kind or another is unknown. The type of thing that can happen is illustrated by four cases that have been taken to the appellate courts. In each case the injured pupil sued the owner of the plant visited because of an injury alleged to have occurred on account of the negligence of the company or its employes. In no case did the pupil recover damages.

The first case, in 1893, denied recovery to a boy, who, with a class of pupils, visited the power plant of the Baltimore Traction Company and fell into an uncovered vat of boiling water.[1] Permission for the visit had been given by the company to the school principal. The court held that the class had gone at its own risk and had enjoyed the license subject to its concomitant perils. "If there was negligence, it was on the part of the principal who took 30 boys at one time to a building filled with danger." The pupils were held to be licensed visitors to whom the company owed no duty with regard to obstructions or pitfalls.

In 1920, a boy was injured while his class was visiting a packing plant in St. Louis.[2] Again, permission had been given for the visit. A moving crane which the pupils had been watching for some time came so close to one boy that in dodging it he fell into an uncovered vat of hot water. The court said the pupils were mere licensees and ruled that the owner's only duty was with regard to hidden traps put out to injure them or willful illegal force. The crane was being used in the ordinary manner in connection with the owner's regular business; the pupils had been observing it. There was no wanton, willful, intentional or reckless behavior on the part of the company or its employes and, therefore, it was not liable.

In another case of this sort, a boy visiting a Louisiana ice plant, with his class, was electrocuted when he touched a live wire.[3] The employe-guide had warned the pupils of possible danger from the wire; but, regardless of the warning, the employer was held not to be liable since a mere licensee must take the premises as he finds them.

In New Hampshire, the legal status of a plaintiff from the class visiting a knitting machine and needle company dropped from that of mere licensee to that of trespasser.[4] The manager of the company had given permission to the school principal to send the group of pupils in charge of a teacher. The court held that the manager had acted outside his scope of authority and "since the manager had no express, implied or apparent authority either to invite or permit visitors to enter the mill for purposes solely of their own, it follows that the plaintiff was a trespasser."

In the case of a trespasser there is no duty on the part of the owner to provide safe conditions, but there is a duty to refrain from negligent conduct toward the trespasser after his presence is known. In the present case, the plaintiff was one of a group watching a knitting machine in operation when the needle in it broke and a fragment of the needle flew into her eye. The employe's conduct would have been imputed to the company, the defendant in the case, had the injury been caused by negligence of the employe. However, the employe could not have foreseen that a needle, even if broken, would fly horizontally far enough to reach plaintiff's eye. Therefore, there was no negligence attributable to the employe and the company was not liable for the injury.

These four cases bring up several principles of law with which the school administrator should be acquainted. His own liability is a separate question, which has been expounded at some length by the research division of the National Education Association.[5] The question at issue in these four cases, however, concerns the liability of the owner of the premises visited by groups of pupils. The courts have been consistent in denying liability but they have not been consistent in the reasoning by which they arrive at this conclusion.

One of the first principles that must be kept in mind is that the owner is not responsible for an employe's granting permission to pupil visitors when harm to them results from their acceptance or solicitation of permission to enter upon the company premises. An employe has no right to give such permission.

The second principle might be that school groups visiting plants and other kinds of business houses are

BEFORE PLANNING A TRIP

1. **The school administrator should gain permission for a group of pupils to visit some factory or other business house from an authorized official of the company, not from a subordinate employe without authority.**
2. **He should discuss with the authorizing agent the possible pitfalls and dangerous aspects of the visit. If the plant is filled with hazards, the class should be divided into visiting groups small enough that the teacher in charge can watch each pupil carefully.**
3. **Requests should be made for a company employe-guide to point out and warn of dangerous equipment.**
4. **Parents and pupils should be acquainted with the fact that they are making the trip at their own risk and that the pupils must be alert to avoid dangers.**

[1]Harry Benson by his next friend *v.* Baltimore Traction Co. 26 A. 973, 20 L.R.A. 714.

[2]Roe *v.* St. Louis Independent Packing Co. 217 S.W. 335.

[3]Myers *v.* Gulf Public Service Corp. 132 So. 416.

[4]Castonguay *v.* Acme Knitting Machine and Needle Co. 136 Atl. 702.

[5]Teacher Liability for Pupil Injury. Washington, D. C.: Research Division, National Education Association, 1940.

mere licensees or possibly even trespassers. They must, therefore, accept the premises as they find them. There is no duty upon the owner to provide safeguards for licensees. Nor does the owner owe any duty to licensees for the careful execution of the ordinary work carried on in the usual manner. The proper conduct of the business, even though dangerous, entails no liability for harm to licensees.

The old view is that an owner does not owe to licensees any duty other than not willfully or maliciously to injure them. This doctrine has been repudiated to some extent by a modern view which imposes liability for harms caused by hidden dangers which the licensee is not likely to discover without warning. In such situations a warning is usually expected but, in view of the precedents, lack of warning may not necessarily establish liability.

The popularity of the school excursion has increased in recent years. It has been one of the technics of enriching the curriculum. It has the advantages of orientating the classroom education with reality; it bridges the gap between pupil and adult life. However, the hazards in this technic should not be overlooked.

Teachers' Meetings Can Be Refreshing

ALEXANDER LEVINE

Teacher of French, Evander Childs High School, New York City

AT the Evander Childs High School, New York City, a program of teachers' meetings has been worked out over a period of several years that attempts to "sell" the conference to the teacher and, by arousihg and retaining his interest, to help him keep professionally alert and acquainted with recent developments in educational theory and practice.

Two types of meetings have been used: (1) the study groups and (2) the general conference. The study groups, first formed in 1936, originally were intended for teachers interested in the coming examinations for head of the department. Many others soon joined the groups and before long a large part of the faculty was engaged in the study of current literature or technics of teaching, class management and philosophy of education. Each member of the group presented a report discussing a book read. This report, as well as a complete synopsis of the book, was duplicated and copies were distributed to all teachers for study. In the course of the year more than 20 leading current works on education were subjected to this searching analysis.

"Issues and Functions of Secondary Education," a report of the Committee on the Orientation of Secondary Education, publications of the Educational Policies Commission as well as the "Regents' Inquiry Into the Cost of Character of Education" were similarly studied, presented to the groups in oral and written form and discussed. Attendance at the group meetings always was large and interest, keen. A lively "give and take" followed the presentation of each report.

These were not meetings of quiet, sleepy audiences that listen politely to the speaker of the month. The subject matter was treated from the point of view of the classroom teacher and became of real importance to each member of the group. This small scale faculty conference proved to be a real success. While no attempt was made to prepare the teachers for any examination in the course of these group reports it is interesting to note that 18 members of the faculty were later successful in the difficult written examination for the position of head of a department.

With the study groups as a basis the problem of the general faculty meeting was then taken up. Reports from the study groups were presented to the entire faculty by teachers familiar with their subject and able through previous study to appreciate the many viewpoints expressed and objections raised. Thus, the discussion of some of the "Issues of Secondary Education," such as adjustment to prevailing social ideals *versus* reconstruction of society, or the famous Issue VIII, "Shall secondary education present merely organized knowledge or shall it also assume responsibility for attitudes and ideals?" aroused genuine interest and brought forth expressions of many shades of opinion.

Similarly, the Regents' Inquiry struck home. The volume on "Motion Pictures and Radio" brought forth several interesting suggestions for possible school use and opened the eyes of many to the limitless possibilities of this form of instruction. "High School and Life," "School and Community," "Education for Citizenship" and "School Health Program," all interpreted in terms of local school conditions, proved to be thought provoking reports.

Within the past year a long range program of faculty meetings has been evolved which promises well for the future. The following letter to the faculty by Dr. Hymen Alpern, principal, explains the plan:

"Beginning with the faculty meeting on Monday, March 18, and extending over a series of monthly conferences, it is proposed to conduct a program of evaluation of the many activities carried on at the Evander Childs High School.

"This inquiry into the various aspects of our school life, suggested by the Cooperative Study of Secondary School Standards, will consist of preliminary questionnaires seeking an expression of teacher opinion, discussions led by the faculty member in charge of the activity, recommendations by the staff and a final evaluation in terms of desirable objectives.

"The first few meetings will be devoted to the gathering and interpretation of information of a statistical nature which will provide the background for further study of the school. . . .

"At subsequent conferences, discussion will center on the following topics: (1) pupil activity program, pupil participation, official rooms, assemblies, publications, music, dramatics, physical activities, clubs, and finances; (2) library service; (3) guidance; (4) curriculum and courses of study; (5) outcomes of instruction, attitudes and appreciations, and (6) the school plant."

Plans for the new year include consideration of the honor school, of the school plant and of our experimental courses in propaganda analysis, articulation of English and history, civilization classes in foreign languages, mathematics for the nonmathematically minded, leadership training and remedial work.

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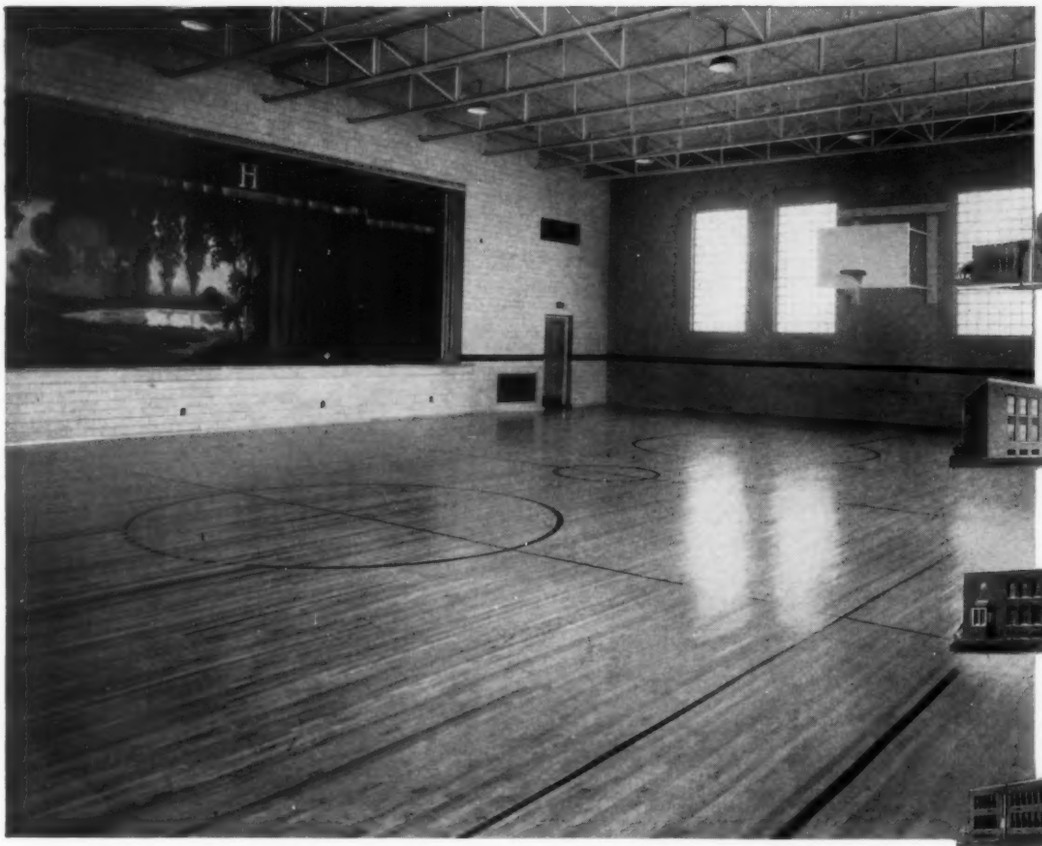

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Does Your Guidance Plan Work?

H. L. HARSHMAN

Director, Administrative Research
Indianapolis Public Schools

INTEREST, school achievement and the family economic status of the high school pupil are vital factors to be weighed by the school counselor when advising pupils on curricular and vocational plans. If these factors are considered seriously as assets and liabilities, many boys and girls will continue to arrive at graduation day, "all dressed up" scholastically and "no place to go" vocationally.

For those pupils who remain in high school until graduation, pupil guidance, beginning with the first year of high school and continuing to the senior year, is largely a problem of choice and adjustment for the individual. However, early in the senior year, it is essential that the results of the school's guidance processes be so crystallized that each pupil will have at least a tentative plan of procedure after graduation.

Because guidance in terms of interest, school achievement and economic status is a continuous process and obligation of the school, the school administrator should make an accounting of the guidance processes at certain definite intervals to evaluate the school's guidance program.

The final periodic school checkup on pupil guidance in the Indianapolis public high schools for those who remain in school until graduation culminates with the analysis and summary of "Guide to Plans After High School Graduation." All high school seniors are asked to indicate their plans for the future by checking on a card the statements that best describe their intentions.

1. I definitely plan to enter _____ college in the fall of 19 .
2. I definitely plan to enter college, fall 19 , but am not sure which one. My choices are: (1) _____, (2) _____, (3) _____.
3. I plan to enter college but must work between high school graduation and college entrance.
4. I do not intend to enter college. I plan to work (in a field for which I have prepared myself in high school) as soon as I am graduated.
5. I plan to go to work as soon as I am graduated. My high school training has been general, not special.
6. I intend to "post" or to take a special course of training in a private school after graduation.
7. I do not intend to "post," to attend college or to work for wages.

Less than 1 per cent of the 1938-39 June graduates of the Indianapolis high schools failed to indicate that they had made plans for themselves after high school graduation. About one third, or 32.1 per cent, of these graduates planned to enter college in the fall of 1939. Approximately one half, or 47.5 per cent, planned ultimately to enter college. About one eighth, or 12.2 per cent, intended to continue their formal school training through postgraduate study or in commercial schools. The remainder of the group, or 31.1 per cent, planned to go to work immediately. This group was about equally divided in respect to whether they took a special course in preparation for a job or a general course of training while in high school.

On the back of the card, space is provided for indicating the major subjects taken in high school, length of time spent in high school, choice of occupation after leaving school and certain other data about the ability and achievement of the pupil as on file in the principal's office.

A summary of the data obtained from the seniors on these cards is of much interest and value to pupils and parents; also from these data school administrators can determine whether the decisions and plans indicated by the seniors have been made in harmony with their interests, school achievement and economic status. In 1938-39, there were 2713 Indianapolis high school seniors who had tentatively made 95 different choices of an occupation.

As a check on the degree of effectiveness of four years of pupil guidance, it is valuable for the administrator to know the interest that the pupil has manifested in selecting his curricular training in relation to the choice of occupation.

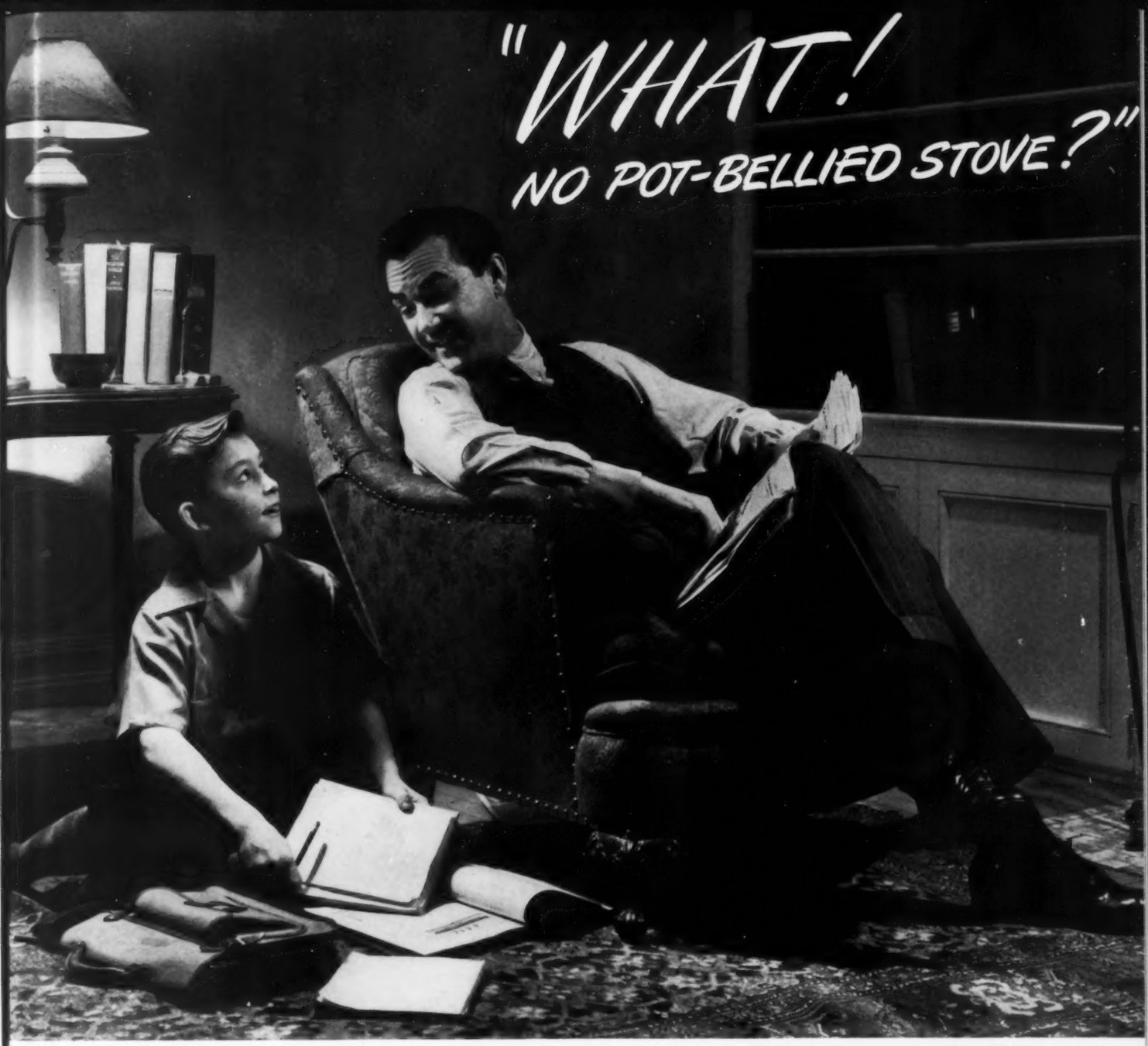
The percentages of the 1938-39 seniors choosing certain occupations who took, in addition to other school work, a major or three years of high school training in a curricular field directly related to their tentative choice of occupation are shown in table 1. The reproduction of the chart includes only part of those occupations and subjects that were chosen by the seniors.

Table 1—Percentages of Occupational Group That Chose Major Related to Occupation

	Major Subjects									
Occupational Choice	*Agriculture*	*Art*	*Commerce*	*History*	*Home Ec.*	*Drafting*	*Math.*	*Music*	*Science*	*Shop*
Stenographer			70							
Housekeeper					55					
Bookkeeper			48							
Office clerk			55							
Mech. eng.							78			
Physician									28	
Carpenter										83
Architect						63				
Machinist										82
Lawyer				50						
Artist		90								
Musician								23		

If a choice of a major directly related to the occupational choice is evidence of interest, it would be of value to know why the percentages of majors in related subjects are higher for such occupations as artists, machinists and carpenters than for stenographers, musicians and physicians, when in all cases it is just as necessary, before employment, to have previous training in one occupation as in the others.

Even though the interest of the pupil is evident when judged by the



The old-fashioned "pot-bellied stove" has just about become a museum piece . . . fortunately for young Americans. Only a few of the fathers of today's school-going generation can recall those not-so-good old days spent in classrooms where temperatures ranged from tropic to arctic — from hot stove to cold corners.

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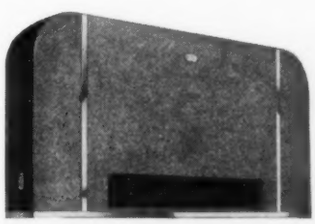

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choice of occupation and the training received in high school, there are many graduates who, although they have manifested an interest in an occupation that requires a college training as a prerequisite, find it an economic impossibility to continue their schooling.

A few of the occupational choices are listed in table 2. The chart shows, in these occupational groups, the percentages of pupils who intend to go to college, of those who intend to go to special schools and of those who plan to go to work immediately after leaving high school.

Experience leads one to believe that many of the graduates either are clinging to a false hope that by some miracle they will be economically able to continue their school work after high school graduation or have not been informed correctly of the prerequisites of certain professions and vocations. It is difficult to understand why 13 per cent of those who wish to be lawyers, 31 per cent of those who wish to be mechanical engineers and 15 per cent of those who wish to be teachers do not plan to enter college.

Table 2—Occupational Choices and Post-Secondary Education

Occupational Choice	*Per Cent College*	*Per Cent Special Schools*	*Per Cent Work*
Stenographer	14	18	68
Housekeeper	14	5	81
Bookkeeper	46	13	41
Office clerk	7	16	77
Mech. engineer	69	15	16
Physician	85	7	8
Carpenter			100
Architect	65	27	8
Machinist	6	6	88
Lawyer	87	5	8
Artist	39	32	29
Musician	57	12	31
Teacher	85	9	6
Beauty operator	20	23	57
Aviator	46	14	40

If we presuppose upon the evidence submitted that the graduate has chosen wisely as to both vocational and curricular offering and is financially able to afford a college or special school training (if necessary or essential to his vocational choice), there still remains to be evaluated the other factor, ability to do school work successfully in light of the plans made for after high school.

Each graduate was ranked scholastically by quartiles in each school. No effort was made to arrange the individual ranking of these seniors in respect to the entire city class. Without comment on the achievement rating that might be advisable for certain occupations, the data shown in table 3 indicate the percentages of graduates by occupational groups who are placed in the first, second, third or fourth quartile of their respective school classes.

Table 3—Percentages of Graduates Who Chose Certain Occupations by Quartiles Achievement Ranking

	Q.1	*Q.2*	*Q.3*	*Q.4*
Lawyer	32	20	25	23
Physician	24	30	17	29
Teacher	46	23	18	13
Mech. engineer	25	25	20	30
Aviator	7	26	29	38
Salesman	15	22	31	32
Stenographer	27	31	24	18
Beauty operator	10	29	29	32
Printer	21	21	43	15
Factory worker		18	27	55
Farmer		12	25	63
Pattern maker			67	33

If a graduate comes to the final periodic checkup in the senior year and objective evidence supports the fact that his interest, school achievement and economic status are in harmony with the occupational choice, training and other plans after graduation, then the administrator may rest assured that guidance processes are functioning in the school. If glaring discrepancies appear after the guidance trends of the school have been evaluated, then it may be advisable to do some auditing in the direction in which these weaknesses appear.

Reorganization at Twin Falls

DURING the school year 1937-38 three new grade schools were constructed at Twin Falls, Idaho, at a cost of $325,000. The construction of these new grade schools made it possible for sixth grade pupils, who had been housed in the junior and senior high school building, to be moved into the grade schools. The junior and senior high school was reorganized into a six year high school but administered by two separate principals and organizations. There are about 900 pupils enrolled in each school. The junior high school handles the pupils of the seventh, eighth and ninth grades and the senior high school handles the tenth, eleventh and twelfth grade pupils.

The physical plant was completely renovated. There are about one hundred rooms in the building and each room was completely refinished, including walls, ceilings, floors and furniture.

Crowded conditions and poor physical equipment prevented much consideration being given to the special departments. Special rooms were equipped for the industrial arts departments, homemaking, art, music, physical education and library reading departments.

Pupils are placed with one teacher for one half day in the junior high school. This teacher is also the homeroom counselor and she teaches geography, history, English (oral and written), penmanship and spelling. These subjects are correlated as much as possible. Pupils in these classes make much more than a normal increase on standardized tests. A scientific test is being made of the results of correlated teaching. Teachers take more interest in the individual because they do not have so many pupils to handle. It is impossible for a teacher to know the individual traits of boys and girls if they have to teach a different group of pupils each period.

In the senior high school the pupils are enrolled in the science and English classes on the basis of interest and ability. Pupils who are interested in attending college are given college preparatory work. Pupils who will not go to college are given a course that they can apply in their daily lives.

The senior high school also has reorganized a boys' and girls' league, which covers all phases of a pupil's life. All pupils in the school have the opportunity to participate in the activities of these two organizations.

Only about 35 per cent of the pupils go to college and many of pupils formerly dropped out of school because of a lack of interest and their inability to do high school work. All boys and girls belong in high school and it is the task of the school to fit its course of study to the non-college pupil as well as to the college preparatory pupil.

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First Year Teacher Faces Disillusionment

MARY JANE COE
English Teacher and Publications Adviser
Lincoln High School, Ferndale, Mich.

CURTAILMENT of educational funds has done one good thing for our schools. It has made citizens of many states a little more school conscious if only to increase the skepticism of the already dubious.

To help the people realize their responsibility to their schools is an accomplishment too often overlooked by educators who train teachers in the phraseology of "the school" and "the society."

Never do I hear idealists speak of the duty of the school to prepare citizens for a future democratic order magically devoid of the errors of this one but I rise in protest. Indeed, the fallacy that allows a mythological paradox of an idealistic school and a realistic society is enough to drive a consciously moral first year teacher to the censored consolation of the local bar.

But, you may justly ask, how can an upstart first year teacher pass judgment on the general concept of the power of education as a democratic force? And you certainly have a point.

Viewpoint Is Yet Unbiased

As a novice in this profession, I stand stripped of all the illusions instilled from the philosophies of college professors of education courses. While as a public citizen biased about the educational system by only one year, I am in some small position to see the actual as well as the theoretical significance of our schools.

Before long I shall join the ranks of most of the other overworked teachers who speak of the profession in awed tones and weave a golden purpose around the messy details of teaching James Smith to repeat "he did" rather than his natural "he done."

It is because I see the net of subjectivity that is cast for me that I am in a position to pass the judgment that may seem frankly impertinent.

First, we must understand the origin of the myth that our schools have the power of training new citizens to create an ideal state from the evils and benefits of this one.

Such a Utopian belief is indicative of a quality of American thinking that has been largely responsible for what progress we have made. It is evidence of an optimism not to be scoffed at by temporary pessimists because it expresses a faith in the possibility of a better order.

But there is a danger in this line of thinking that has been, in my mind, one of the biggest drawbacks for our schools. It is possible for a public to put all of its hopes into faith and none into action, and we fail to emphasize action in our present teaching.

Each Generation Blames Educators

Each generation as it leaves our schools sets out with selfish ends to become the citizens who will blame educators if its own children fail to make acceptable members of society.

This, then, is one of the major tragedies of the current belief in the omnipotent power of the schools as social benefactors. It is the grave danger of allocation of responsibility.

This danger, however, is not the fallacy in our paradox of an isolated school and society. The error in reasoning lies in a simple misunderstanding of democratic procedures, a misunderstanding that must not be overlooked by people who are sincerely interested in preserving the shreds of world democracy.

There can be no paradox of "school" and "society" for the simple reason that school and society are identical. They are divorced only in theory, never in practice. That fact remains in spite of popular attempts to separate education from the people who instigated it and control it at the present time.

This fallacious reasoning has brought about grave misunderstandings. To say that the schools do not deserve the recent accusation of defeat is to ignore apparent facts. But such criticisms are harmful because they do not take cognizance of the elemental oneness of education and the people.

Our own publicity last spring has emphasized for us two outstanding schools of criticism. There are those who decry "frills" and advocate a return to the three "R's" and the rod. On the other hand are those who claim that our schools are not yet organized to give the pupil a practical education for our modern world.

Now bear in mind that our schools are democratic institutions controlled by the will of the majority and you will see immediately the problem that educators face.

It is natural that even the more progressive schools have reacted as they have and now follow the middle of the road course in an attempt to please both sides as well as a consistently disinterested majority.

Junior Cannot "Write" His Name

One example of this conformity is in the elementary problem of learning to read and write. Tested principles have been established to show that learning two sets of letters at one time, the printed letters of books and the written ones of script, is too confusing for the average child. As a result of this information, many modern schools teach what is known as manuscript writing.

But the conflict comes with the paternal question, "Well, son, can you write your name?"

Mothers and fathers, even the youngest ones, are horrified because Junior cannot "write" his name. And under pressure the schools bow to their demands at the expense of scientific fact.

So far this seems to be a vindication of the schools at the expense of society but, as I have pointed out, that is impossible. If we are to get

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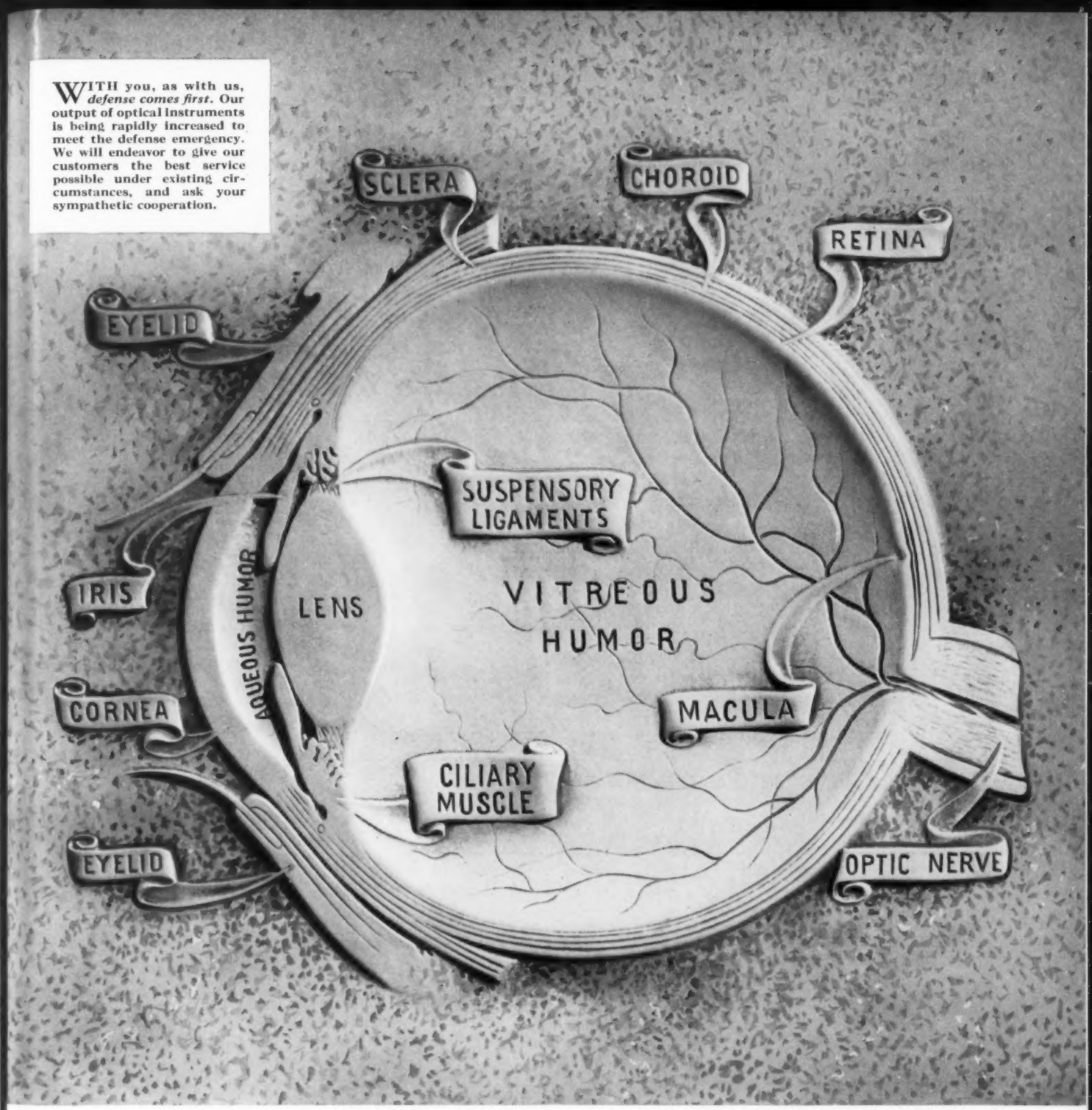

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at the root of the force or lack of force of the schools in a democratic order, we must accept the basic assumption that both have erred in underestimating their integral relationship.

My experience as a parent is entirely vicarious, so I shall not attempt to discuss society's lack of acceptance of responsibility in this matter of education. Guilty as society is, I believe that the schools are more guilty because it is their business.

Yet, in spite of the fact that educators are responsible to society, this matter of bowing to the dictates of a community is the most disillusioning factor a first year teacher faces. In fact, it is so disarming that the way she faces it determines to a great extent her subsequent philosophy of teaching.

Wise novices will accept it as a democratic principle and base their ideas for educational improvement on it. Cynical teachers may reject it cantankerously and so lose their chances at educational reforms. Lazy teachers will neither accept nor reject but merely conform.

Most of us would cringe to think of a totalitarian system of education here. We have accepted the democratic method as a right. But in accepting it as a right we have overlooked its demands as an obligation.

New improvements in educational science are news in education journals only. Accepted methods of education are presented by educators to educators in lengthy, intolerably dull reports at the same time that other governmental news is being written in readable style in every newspaper.

If education is to progress in its attempt to train democrats, the people must be informed about their educational developments as they are about their political developments. This is the challenge that educators in general ignore.

We hide our methods of teaching behind the shabby cloak of our profession and then we wonder why the pupils we teach are not sympathetic with newly established improvements when they become parents. Unless they are shrewder than most pupils they have learned through these methods but they do not understand them.

This problem was most directly revealed to me in my work with pupils who publish the school newspaper.

Pupil opinion was often rejected by faculty members without any attempt to set the future school board elector straight in his thinking. No explanation was made simply because it would necessitate revealing general educational principles.

In an effort to meet the naturally rebellious reaction of the pupil journalists, I tried to explain in most cases the principle of the responsibility of the school to our own community by pointing out that all parents were not as liberal as their own.

"Well, then," the editor reasoned, "our job is to make the parents understand."

There, in unprofessional language, is the present responsibility of the school. Adult education, you may call it. And, certainly, much must be done in adult education if the democratic teaching of young people is to take effect.

But the schools are not excused that easily. Their responsibility still rests immediately within the school itself.

Pupils must be led to understand methods and principles of education while they are still in contact with them. Educational progress must be published as news directly affecting the people. Expressions of pupil opinion must be treated understandingly since they so often mirror parental views.

Many educators have accepted these facts and extensive programs of public relations have resulted. But the routine classroom teacher still misses many opportunities to educate father and mother indirectly.

We can only conclude that the problem of education for a true democracy is a dual one, including the acceptance of responsibility by both educational workers and members of society in general. As soon as there is this mutual cooperation the schools themselves will become more forceful.

We may even go so far as to hope that such progress will bring about more adequate teaching facilities. Perhaps if the parents of my community realized the principle of trying to teach pupils to enjoy reading I would not be teaching slow readers American literature in a mechanical drawing room in which their feet swing from high backless stools as they crane their necks to see the teacher some place below.

Maintaining democracy partly depends on keeping our democratic method of running schools. Improving our schools means a dissolution of the fallacy that "school" and "society" may be considered apart from each other.

Suggestions for Developing Teacher Morale

CECIL D. HARDESTY

Acting Superintendent, Montebello, Calif.

1. **Recognize that administration is justified only as a service to the teaching situation.**
2. **Give teachers sympathetic, constructive supervision.**
3. **Emphasize that it is their school, not my school. The teachers do the work; give them the credit for it. Don't attempt to stand in the limelight, taking credit for school activities; put the teachers there. You will appear to much better advantage in the reflected glow.**
4. **Support teacher action in discipline and other situations where it is at all possible to do so; and where you are unable to give support, try to arrange for the teacher to "save face" in the situation.**
5. **Be a supreme court, not a universal tribunal.**
6. **Be willing to delegate and assign to others both responsibility for programs and activities and opportunities to do constructive work.**
7. **When you must correct or discipline a teacher, do it privately.**
8. **Consult your teachers when you are adjusting the program of a problem pupil.**

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Rivalry in Transportation

R. C. WILLIAMS

Professor of Education
State Teachers College, Superior, Wis.

IN A certain locality in the Midwest, the superintendents of two near-by high school districts called at a rural home during the month of August. The occasion for these visits was that a girl in this home had completed the work of the elementary school, which was all that her home district offered, and was looking forward to high school.

The statutes of that state provided that she could attend any first-class high school in the state that would admit her and that her tuition fees would be paid by the district in which she resided. Each superintendent was soliciting her attendance at his high school by pointing out special features of his program of studies and by offering transportation facilities. One of them proposed to send a school bus to her home, while the other agreed to reimburse her for the cost of transporting herself.

Compete for Tuition Pupils

Situations such as the foregoing are duplicated in many parts of the United States. School officials are conscious of the advantages that a larger school makes possible, which can be obtained through the revenue that nonresident pupils produce. In asserting their candidacies for administrative positions, many superintendents and principals submit as a major qualification their records in attracting tuition pupils. Boards of education in many rural areas expect their administrators to perform this duty and pay them salaries in proportion to their success. The prospective high school pupil anticipates his further education in a new light, perhaps concluding that some factor other than athletic ability has induced high school officials to become oversolicitous.

This confusion becomes most frequent in those areas in which incomplete statutory provisions have been made for the high school education of many rural pupils. The enactment of laws providing for the payment of high school tuition from public funds has done much to stimulate high school attendance. But when the choice of high school is left to the discretion of the pupil and when there is no legal provision for transportation, the way is opened for various forms and degrees of interschool competition.

Since the tuition fee is paid by the school district in which the child resides and the officials of that district have no choice as to the amount paid or the district to which it is paid, as long as the charge is within the legal maximum, the tuition rate is a negligible matter in the choice of school to attend. But much emphasis is placed upon the attractiveness of the transportation facilities offered and near-by districts vie with one another for customers.

The nature of the transportation services tendered may be one of several types. Ordinarily the tuition pupil would be expected to pay the proportionate cost of transportation until competition among districts becomes so keen that the high school offers to pay the cost in order to secure his attendance. If the high school district maintains bus routes for the transportation of its own pupils, nonresidents may be given the privilege of riding to school in these vehicles, if seating space is available. When walking distances to bus routes are excessive, the routes may be extended beyond the borders of the district to suit the convenience of tuition pupils. In case there are no bus routes in operation, one can be created on short notice either by the officials of the high school district or by some private party with whom an agreement has been made.

Solicitation of rural tuition pupils from neighboring school districts is common practice among administrators, transportation being the factor frequently employed to lure rural pupils away from their home districts. This situation has tended to delay development of comprehensive programs of educational progress for school districts in all areas

Cases have been reported in which pupils had formerly transported themselves but, later, were reimbursed for the same, in order to ensure their continued attendance at a certain high school. It has been said that, in some localities in which suitable transportation arrangements could not be made, living accommodations near the high school were provided without cost to the nonresident pupils. Undoubtedly, many other plans suited to local conditions are in operation.

Hostility Delays Progress

One of the more unfortunate and undesirable outcomes of this practice has been the spirit of hostile competition and the ill will that have arisen between neighboring communities. This tends to delay the development of a comprehensive program of educational progress for all areas. Transportation has not been thought of as a fundamental element in equalizing educational opportunity but rather as an additional service that the high school district generously bestows upon its customers to attract their attendance.

To the extent that it has helped a larger number of children to get to high school and has stimulated a better quality of transportation service, it may have had some value. However, in too many instances it has provoked abuses of public funds and unsatisfactory conditions that receive little concern or supervision from anyone.

The most obvious solution of this difficulty is the reorganization of administrative units so that every child will reside in a high school district,

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in which the proper officials have made adequate provision for transportation as well as for instruction. If present nonhigh school areas are to continue to function, boards of education and school administrators of neighboring communities should be brought together to work out sensible and ethical procedures for serving the nonresident pupils in their high school areas. Needless to say, the fundamental appeal of a secondary school should be found in a rich and varied educational opportunity in which transportation is only one attractive factor.

As long as rural pupils are permitted to attend any public high school at the tuition expense of their home districts but with no recognition of the need for transportation facilities, this condition will continue to exist.

The attempts to regulate the problem, such as making it illegal for receiving districts to use their funds to transport nonresidents, have made but little headway. Including transportation as a part of the cost to be borne by the home district seems entirely reasonable. Limiting the obligation of the nonhigh school district to pay tuition and transportation charges to the nearest high school would eliminate this undesirable competition in most instances but this step should be safeguarded by the assurance that many of our rural high schools would provide better educational facilities than exist at present.

Beyond the legal aspects of this issue are the doubtful ethical practices to which many school officials resort in attracting nonresident pupils. Such matters cannot be corrected through legislation but through the voluntary acceptance on the part of school administrators of proper standards of professional conduct.

Teachers Should Work in Summer

WILLIAM STOCKING JR.

Science Teacher
Northeastern High School, Detroit

AMERICAN secondary schools are becoming "people's schools" instead of purely academic college preparatory institutions. Secondary education for all is an attempt to put into practice the American ideal of equality of opportunity. Universal secondary education is imperative if our complex problems are to be solved democratically. This education must be such that each individual may develop his own abilities to the fullest extent.

In the "college preparatory" days of secondary education, intensive study in an academic field and a few education courses may have been adequate preparation for teaching. In the future, a much broader program of teacher preparation will be needed.

Probably because secondary education of the future will be concerned with life problems that cut across subject matter lines, teachers should have a broad background in the social studies, exact sciences and English, rather than narrow specialization in one or two subjects. Teachers should understand the psychology of the learning process and have a thorough and sympathetic understanding of youth and its problems.

Teachers should take an active interest in community affairs and participate in changing school programs to meet the needs of the changing social order. They should have a knowledge of the world of work in all of its aspects, an understanding that cannot be acquired by teacher training programs. Competency must be more than academic knowledge. It should combine academic knowledge with an appreciation which can be obtained only by first-hand experience and observation.

Experience in the world of commerce, industry and labor would give teachers points of views and feelings concerning these human activities that no amount of academic study could give them. This understanding, combined with academic study of these problems, would enable an individual teacher better to prepare his pupils for their future lives and to talk to them as one who knows what he is talking about. Many teachers have gone through the usual teacher training program and have started teaching with little or no experience or knowledge of the work of the outside world. How can these teachers interpret social needs and change school programs to meet these needs?

In order to obtain higher professional rating, teachers go to summer schools and work for advanced degrees. However, working in a factory or a store might do more to help a given teacher to understand his pupils and what they will have to face after school if such experience were combined with academic training.

Teachers' colleges should face this problem realistically. They should work out, in cooperation with industrial management and labor leaders, courses of work experiences in which teachers would do actual industrial or store work, including unskilled manual labor. A means of evaluating these courses might be devised so that they could be submitted as credits toward degree programs.

A teacher should do a different kind of work each summer. He should work in industries of all types, ranging from organizations in which management and labor unions work together harmoniously and efficiently to organizations where relations with unions are notoriously bad. Then when these things are discussed with pupils, the teacher can really know what the discussion "is all about" and can give illustrations based upon his own experience and observation.

Such work experiences might do much to dispel a popular impression that "those who can, do; and those who cannot, teach." Institutional summer school programs for in-service teachers are inadequate. Secondary school curriculum workshops are a step in the right direction. Another step would be for colleges of education to organize work experience courses.

These cooperative courses would improve the quality of instruction and facilitate needed secondary school change. They would also encourage valuable exchanges of thought among educational, industrial and labor organizations and would aid the schools in promoting the important activity of social interpretation.

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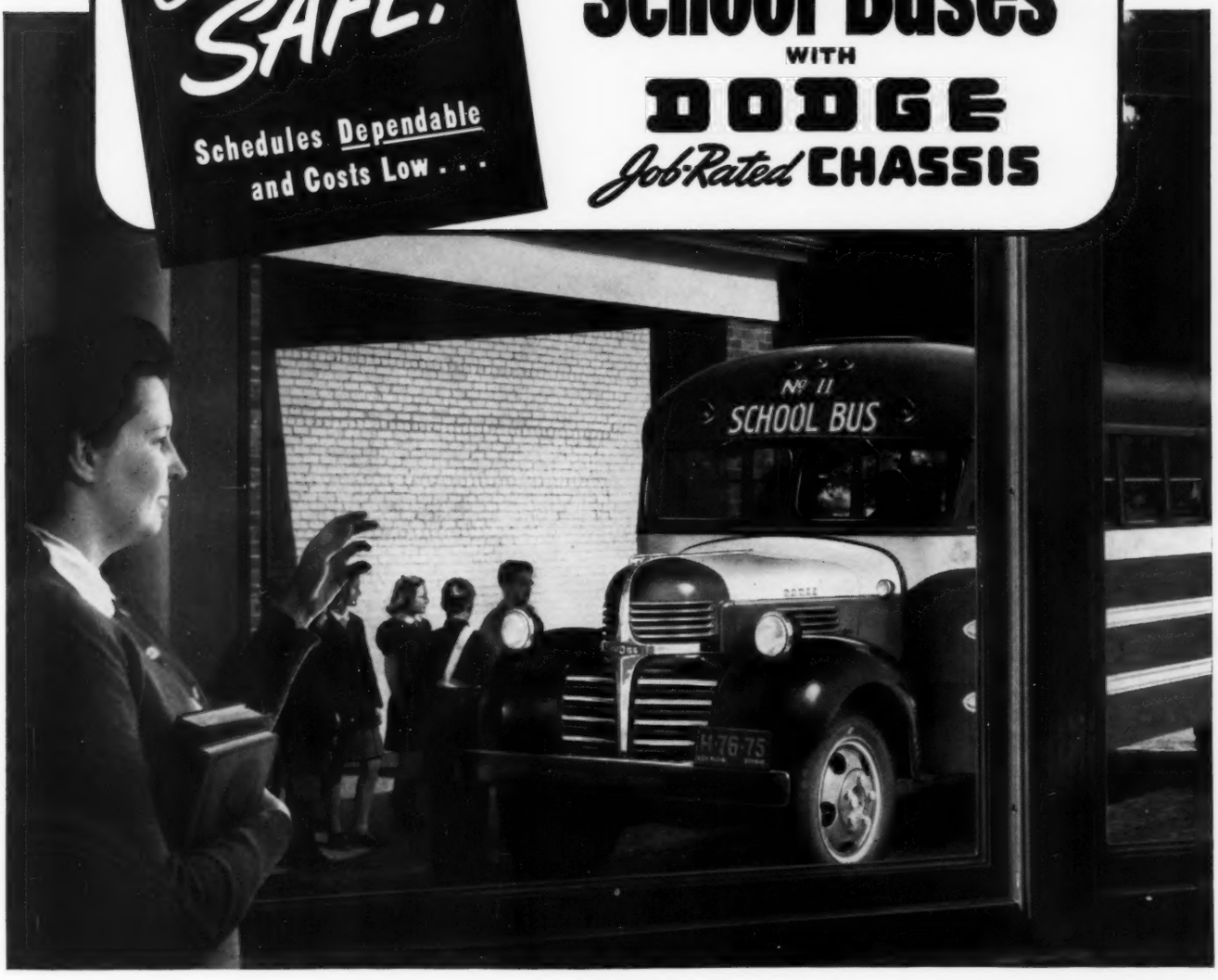

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Legislation in the Social Studies

M. M. CHAMBERS
Specialist in School Law

IN WHICH states does the legislature require that the federal and state constitutions be studied in the schools? Which states prescribe compulsory courses in United States history or state history? Where is instruction in economics and cooperative marketing required?

What states exclude from the schools by law partisan, sectarian or subversive books? What kinds of provisions are found in the various states regarding display of the flag of the United States, the compulsory flag salute and other patriotic observances and ceremonies? Are these provisions well suited to promote understanding of the principles of democracy and loyalty to the best American ideals?

Up-to-date answers to most of these questions are available in a report entitled "Legislative Regulation of the Social Studies in Secondary Schools," which forms a part of the Ninth Yearbook of School Law, published by the American Council on Education.[1] The study of the statutes of the 48 states and other sources showing the status and effects of legislative regulation of the social studies was made under the auspices of the Committee on the Social Studies of the American Political Science Association, headed by Prof. Phillips Bradley of Queens College, Flushing, N. Y.

40 States Teach Constitution

The commonest statutory prescription regarding the social studies is that the United States Constitution shall be taught. This requirement is found in various forms in 40 states. The only states that apparently do not have it in their statutes are Arkansas, Kentucky, Maryland, Mississippi, Montana, North Carolina, Ohio and Wisconsin. Half the states prescribe instruction in their respective state constitutions. The nature of the prescriptions ranges all the way from the mere broad injunction that instruction in the constitution shall be given, without any specifications as to any particular course or time allotment, to an express stipulation that the instruction shall be given a specified number of times a week throughout one academic year.

Half the states also prescribe courses in American history and 12 states give voice to the spirit of local pride by requiring instruction in state history. These 12 states, contrary to what might be supposed, are not concentrated in any particular region. Four of them are in the South and three are in New England. One is an east north central state and the remaining four are west of the Mississippi River. Statutory prescription of instruction in history other than United States or state history is rare. It is found in Vermont and also in Ohio, where it is specified that the history of other countries shall be taught. In Indiana and Wisconsin the statutes require the teaching of ancient, medieval or modern history.

Civics Is a Broad Term

More than half the states have in their statutes the requirement of instruction in civics, either national, state or local. As is well known to social science teachers, the effectiveness of these courses depends largely upon the wisdom employed in the selection of textbooks and the formulation of the courses of study, as well as upon the education of the teachers by whom the courses are offered. The latter factor is the most important of all. Civics may be anything from a lifeless and repellant rattling of the dry bones of governmental structure to an absorbing investigation of local and national governmental problems, eminently usable in the everyday life of the pupils.

In addition to the states in which civics is stipulated in the statutes, one finds in a few states a different terminology, sometimes indicating a somewhat narrow emphasis on the duties of the voter and sometimes showing a conception of civic duty much broader than what was usually comprehended under the heading of civil government in earlier days. For example, Vermont and New Hampshire both require instruction in "election laws and voting." Vermont also adds a broader phrase, requiring instruction in "political or social science." An old statute in Ohio contains the obsolescent phrase "political or mental science." New Jersey and Iowa, in language of more recent origin, require the teaching of courses in "social problems" and "problems of democracy," respectively.

Iowa Requires Economics

Iowa statutes require the teaching of economics; a course in agricultural economics must be offered in Oklahoma and Wisconsin. Wisconsin also stipulates that instruction in cooperative marketing must be available and North Dakota and Montana make similar statutory prescriptions.

Another side of the picture is the exclusion by law from the schools of certain types of books or the forbidding of certain utterances or actions by teachers. It appears that about 18 states have some such provisions in their statutes. Outstanding among these are California and New York. In California teachers may be dismissed for aiding or advocating "acts of criminal syndicalism" and New York forbids "treasonable or seditious words or acts" by teachers and excludes textbooks that may be "seditious in character, disloyal to the United States, or favorable to the cause of any nation with which the United States is now at war."

Other strict prohibitions against disloyal or unpatriotic teaching are found in the statutes of Oklahoma, South Dakota and some other states. The commonest stipulation regarding books relates to the exclusion of partisan or sectarian documents. Such books are excluded from schools and school libraries in about a dozen states. Utah and Kentucky,

[1]The Ninth Yearbook of School Law, 1941, (200 Pp.) is a review of recent court decisions in all the states affecting all phases of education, with additional articles on timely topics in school law.

---Rabbits?

FILTERING through the minds of youth are dreams of pets and professions . . . airplane models and athletics . . . vacations and vocations . . . the dreams of youth . . .

Modern educators are accepting the challenge to direct their pupils into channels of activity compatible with their indicated abilities and interests.

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in addition to prohibiting partisan or sectarian books, also exclude "atheistic, infidel or immoral doctrines."

Kentucky, by a statute of 1940, forbids teachers to criticize "any legally constituted school of healing, science or professions." California seems to be the only state that forbids teachers to "reflect in any way upon citizens of the United States because of their race, color or creed."

The wisdom of statutory regulation of the curriculum and of teaching is debatable and affords a particularly timely question at this stage in our history. No one doubts that it is proper to declare the general policy of the state through legislation. But there is doubt as to whether it is necessary or wise for the legislature to attempt to control the internal administration of the schools and the teaching process through general statutes. The language of such statutes, being necessarily broad and often actually vague or ambiguous, is sometimes said at best to serve as an unnecessary basis for intelligent instruction and, at worst, to be a source of unhealthy restriction on the freedom of devoted and loyal teachers.

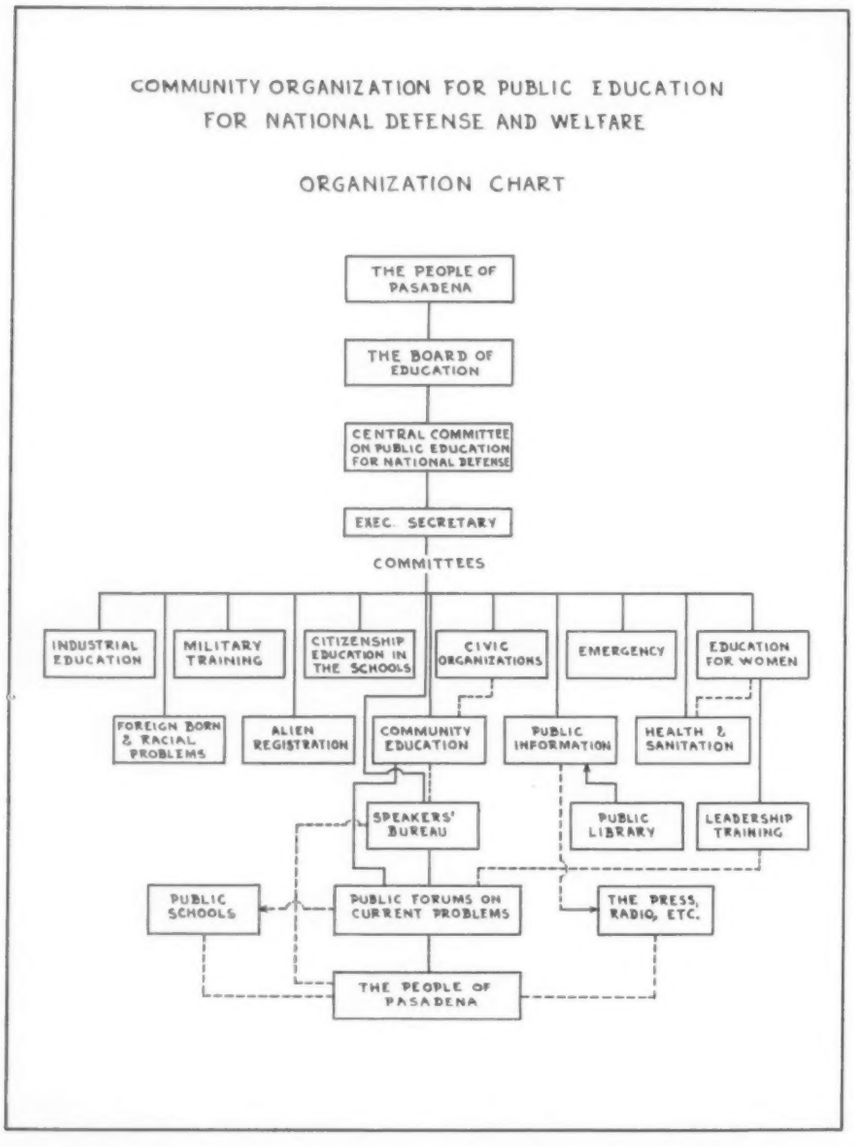
Related to the regulation of curriculum and instruction are the numerous legislative provisions regarding the display of the flag, the flag salute and other patriotic observances and ceremonies in the schools. These also come in for discussion in the Ninth Yearbook of School Law, particularly on account of the 1940 decision of the U. S. Supreme Court to the effect that a school board in Pennsylvania could expel pupils for refusal to participate in the compulsory flag salute, without violating any rights guaranteed by the United States Constitution.

The gist of the opinion of the majority of the court is that the matter is one to be disposed of by state and local policy-making bodies. In the words of Mr. Justice Frankfurter: "The wisdom of training children in patriotic impulses by those compulsions which necessarily pervade so much of the educational process is not for our independent judgment. . . . So to hold would in effect make us the school board for the country. That authority has not been given to this court nor should we assume it."

In the same case there is a dissenting opinion by Mr. Justice Stone, who said: "While such expressions of loyalty, when voluntarily given, may promote national unity, it is quite another matter to say that their compulsory expression by children in violation of their own and their parents' religious convictions can be regarded as playing so important a part in our national unity as to leave school boards free to exact it despite the constitutional guarantee of freedom of religion."

It is a healthful sign that such issues, intimately related as they are to the growth of freedom, democracy and unity in America, have been thus debated by the highest judicial tribunal in the land. We are still progressing through democratic processes toward better adjustments of the temporary conflicts that arise from time to time between what are deemed to be individual rights on the one hand and what is deemed to be essential to the common welfare on the other hand.

It was with some such thought in mind that Dr. George F. Zook, president of the American Council on Education, in writing the foreword to the Ninth Yearbook of School Law, said: "At this hour when the forces of democracy and totalitarianism are locked in combat and when our national energies are largely engaged in accelerating to full speed a great program of defense, it is singularly appropriate that we should watch the evolution of the legal basis of public education in America."



Above: Chart of community organization for national defense as worked out for city of Pasadena, Calif., by John A. Sexson, superintendent of schools.

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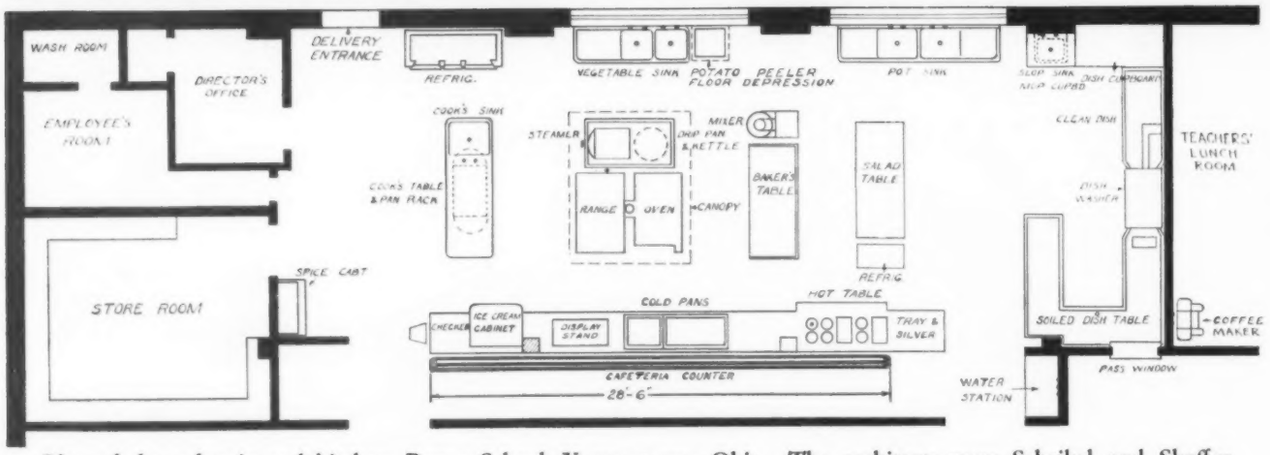

Plan of the cafeteria and kitchen, Rayen School, Youngstown, Ohio. The architects were Scheibel and Shaffer.

Equipped to Serve

EDNA GILBERT

**Lunchroom Director, Rayen School
Youngstown, Ohio**

THE Rayen School cafeteria, Youngstown, Ohio, is located in a new wing of the building on the ground floor, half a flight down from the main floor with a separate entrance and exit. The dining room is rectangular in shape and has a seating capacity of 630. The kitchen is conveniently located on the horizontal side. Both rooms have soundproof ceilings and are well ventilated.

At one end of the kitchen is the dishwashing equipment; opposite this are the storeroom, employes' locker rooms and the director's office. It is here that the delivery entrance opens directly into the kitchen, a few steps from the storeroom, which makes for quick and convenient passage of supplies.

The central unit of the cooking apparatus is located in the middle of the kitchen. One of the most important cooking items is the range, which has two hot tops and one grate top. It has two ovens which are porcelain enamel lined and are provided with heat regulators.

A two compartment direct connected steam cooker is used for cooking vegetables. It has a stainless steel interior and is fully automatic with thermostatic steam controls. This steamer, together with a steam jacketed kettle, having a capacity of 20 gallons, is set in a 2½ inch depression in the floor.

A combination table and sink comprises a part of the cook's equipment. The table top is constructed of 14 gauge, 18-8 stainless steel, having all corners rounded on a 2 inch radius. On the working side, the table has two drawers, one at each end, 24 by 22½ by 5 inches. These drawers are constructed of 16 gauge galvanized iron with 14 gauge stainless steel fronts. They operate on ball bearing extension arm slides and are fitted with chrome metal pulls. The bottom of each drawer is snugly fitted with a ¼ inch thick lining cemented in place as a silencer.

At the extreme right end of the table is the cook's sink, measuring 32 by 24 by 10 inches, constructed of 14 gauge 18-8 stainless steel. The drain is located in the center and a nonclogging waste outlet is set into a die-stamped ½ inch recess. It is equipped with a 3½ inch diameter, ¾ inch deep stainless steel perforated strainer. A lever handle, located under the bottom of the sink, operates this outlet. The sink is fitted with a chrome plated combination swivel faucet mounted above on the table side and centered in the middle of this side. The table and sink are supported on six 1½ inch standard iron pipe legs with adjustable chromed bell type feet. These legs are fastened to 14 gauge galvanized iron channels welded to the table top. Twelve inches above the floor is an undershelf of galvanized iron welded to the cross braces. The cook's table and sink are integral.

Adequate refrigerator space is located near the cook and the pastry cook. The refrigerator has 41 square feet of shelf area, is finished inside with white porcelain enamel, outside with stainless steel and has the refrigerating unit hermetically sealed in and mounted in the bottom. Insulation is of sheet cork. The box is fitted with retinned steel wire shelves mounted on adjustable supports. Six solid doors have extra heavy cast brass chrome plated fasteners provided with an automatic padlock attachment.

Next in line is the two deck bake oven, which has well-insulated air cell asbestos walls, protected by porcelain enamel housing. The capacity of this oven is 12 nine inch pies or 21 loaves of bread per deck.

Directly in front of the oven is the baker's table. The work side of the table has two large compartments, one at each end, approximately 20 by 21 by 20 inches. Between these two cupboards is one drawer 28 inches long, 5 inches deep. Below the drawer are two tilting bins approximately 11 by 15 by 20 inches. The bins, drawer and cupboard compart-

ments are constructed of heavy galvanized iron and equipped with veneered polished 20 gauge 18-8 stainless steel. The bins are removable and the drawers operate on ball bearing rollers in angle iron tracks. The bottom of each drawer is fitted with ¼ inch thick lining like that of the cook's table. The top of the table is constructed of 3 inch thick sectional kiln-dried maple strips assembled with wrought iron tie cords. Provided at back and both ends of table is a 14 gauge 18-8 stainless steel back riser, which extends 6 inches above the work top proper. At the ends this riser carries down the full thickness of the 3 inch maple work top. This table is supported on four 8 inch high standard iron pipe legs with adjustable bell type feet.

Placed at one end of the baker's table is an electric mixer of ½ h.p.,

Above: Baker's table has maple top. Left: Tray section, which is the beginning of the counter.

equipped with one 30 and one 20 quart bowl, adapter, beater, whip and attachment service outlet.

A salad table, 84 by 36 by 36 inches, is flanked at either end by a refrigerator and a two compartment sink. The top is in one piece, constructed of 14 gauge stainless steel. Two drawers on opposite sides near the end are constructed and fitted with pulls and linings.

A refrigerator with 12 square feet of shelf area near the salad worker also serves for the use of the pastry section. In this location, it is convenient for storage of salads and gelatin dishes for replenishing the near-by counter cold plate.

Sink equipment includes a two compartment unit with right and left 30 inch drainboards. This serves as a utility all purpose unit during the morning for use in salad material cleaning and preparation, and after the meal, for the washing of utensils and pans. This sink is 120 by 26 by 36 inches. The drainboards and sink have an integral splash back 14 inches high, extending the entire length with 2 inch flanges at top and ends to give room for water pipes to faucets. The sink is fitted with a chrome plated combination swivel faucet, mounted through the center of the splash back, a strainer plate and waste outlet.

A single compartment sink of the same construction details, with only one drainboard, is located near the range and is accessible to the baker's table. This sink measures 84 by 24 by 36 inches and the compartment is 24 by 12 inches, with the drainboard 36 by 24 inches at left end. The splash back and drainboard are integral with the sink, making a welded one piece unit. This sink is used in vegetable preparation. Emptying into it is a potato peeler, with a capacity of 25 pounds. The peeler sets in a floor depression of 1½ inches and is in close proximity to the vegetable steamer and near the range. All sinks and table tops of stainless steel have 1½ inch radius cove corners, both horizontally and vertically and are welded round, polished and finished smooth. All vertical and horizontal corners of sink splash backs are coved on a ¾ inch radius and the intersecting joints are spherical. The top fronts of the sinks and drainboards are finished with a ¾ inch radius horizontal rolled edge with all corners shaped to 1½ inches, welded, ground and

polished smooth, forming safety corners. The sinks are constructed of No. 14 gauge, 18-8 stainless steel with No. 4 mill grind finish.

The service counter is located in a space immediately off the dining room and is enclosed within the kitchen. The arrangement was planned to accommodate about 150 per 20 minutes' serving period.

Pupils enter the cafeteria through doors at one side of the kitchen area. The station for water and glasses is at the extreme right, just inside the entrance and a pupil helps himself to water before proceeding to the service counter. This water station has two chrome plated push back glass filler faucets, over a countersunk drip tray with removable stainless steel top and waste outlet. The capacity is 15 gallons per hour.

The service frontage arrangement begins with the tray and silver stand. This section of the counter is 42 inches long and 36 inches high at the portion which supports the silver box. The tray section is 18 inches high, the full width of the counter. The silver stand above this section is 12 by 42 by 36 inches. The tray section, top, back and one end, is finished with 14 gauge 18-8 stainless steel.

The silver box has four compartments having rounded bottoms, securely welded to outer frame which forms the enclosure and has reenforced top and bottom rims.

Hot Table Is Electrically Equipped

Next in line is a hot table forming a section of the counter 84 by 30 by 36 inches. The top of the table is integral with top of counter and of the same material, with openings for two 9 inch round receptacles followed by two 12 by 20 inch openings to accommodate full pans or twin half pans and then by four more 9 inch round receptacles to receive vegetable jars.

This hot table is equipped with electrically heated food storage receptacles. It is well insulated and provided with temperature control switches in the bottom of each unit. It has also an 8 inch No. 14 gauge 18-8 stainless steel work shelf bracketed to the top edge. Under the shelf is a 10 inch hanging shelf.

At the end of the hot table a blank area is left in the counter top. This is the bread section and the underneath part of it is left open for the use of a cart. The cart is loaded with the dishes and pushed into the space, saving unloading and extra handling of the dishes.

Next in line are the cold pans, one of which is for salads and measures 44 by 24 by 2 inches; the other, for milk, measures 30 by 24 by 4 inches. One ¼ h.p. air cooled compressor cools both of these pans.

At the end of the cold pan for milk is a 73 inch length of free counter top on which there is a two deck glass display shelf, 40 by 18 inches. The uprights of this shelf are constructed of 1 inch square brass tubing, chrome plated.

Checker Stand Is in Center

Next, in an open area with a frontage of 37 inches, is a four compartment ice cream cabinet, which adjoins the checker stand and which is built as an integral part of the counter. The checker stand is 28 by 30 inches, with top and front like the counter. It is provided with a foot rest and a galvanized cash drawer and lock, with 18-8 stainless steel veneered front and chrome plated handle.

The cafeteria counter measures 32 feet by 30 inches by 38 inches, inclusive of 8 inch adjustable legs. The exposed front and end finish is of a laminated insulating veneer on galvanized iron, held on with pilasters and railings both vertically and horizontally of 2 by ⅛ inch bar iron veneered with 22 gauge 18-8 stainless steel. Corners are of 2 inch angles finished in the same manner and all fastened to counter with concealed head bolts. A lower shelf of 18 gauge galvanized iron is built at tray stand, hot table cold pans and pastry section while an intermediate shelf is built at the pastry section only. The top of the counter is of 14 gauge 18-8 stainless steel, with a ¾ inch radius rolled edge; all outer edges are flanged down 1½ inch.

The tray slide is 28 feet long, comprised of three parallel lines of polished stainless steel tubing, 1 inch outside diameter. The top of the rail is 1½ inches below the top of the counter and the edge of the tray slides against the flange on the top, instead of beneath it.

The compact dishwashing unit, an essential part of the kitchen, is in close proximity both to the service counter and to the line of exit, enabling the passing of soiled dishes through a window opening from the dining room. The soiled dish table is in one piece of approximately 52 square feet. In this area, one 18 by 5 by 2 inch drain constructed of 18-8 stainless steel is built near the dishwasher with a flush perforated top plate and 1½ brass drain outlet with beehive strainer. The clean dish table, 72 by 30 inches, is of the same design and materials as the soiled dish table. The dish tables have leg bases of 1½ inch standard iron pipe with adjustable bell type feet. These are fastened to the underside of the table tops with 14 gauge galvanized iron channels. The legs are reenforced with 1¼ inch standard pipe securely welded.

The dishwashing machine has a ¾ h.p. motor and the body is built of 18 gauge stainless steel. The pump has a capacity of 140 gallons per minute and pumps water from the suds tank at the desired temperature heated by direct steam.

A cupboard, 96 by 24 inches, made in three sections, is constructed of galvanized steel. These sections include a mop cupboard, 36 by 24 inches, high enough to allow for a shelf 10 inches from the top and for hanging standard mops, and two enclosed cupboards with shelving for clean dish storage.

Coffee Not Served to Pupils

A teachers' dining room, having a seating capacity of 36, adjoins the pupils' dining room. As teachers are served at the counter with the pupils, they are offered the same menu and receive the same service, except for coffee and tea, which are not served to pupils. In the teachers' dining room is an electric combination coffee maker constructed of stainless steel. The water tank has a capacity of 4 gallons and is arranged to supply hot water automatically. It has a storage and warming capacity of 48 cups.

The efficiency of a cafeteria kitchen depends to a great extent upon the type of equipment provided and upon the ability of the workers. However, no matter how intelligent and well trained your workers may be, if they are not supplied with the proper equipment their capacity to produce is limited. This is particularly true in a school cafeteria in which time is an important element.

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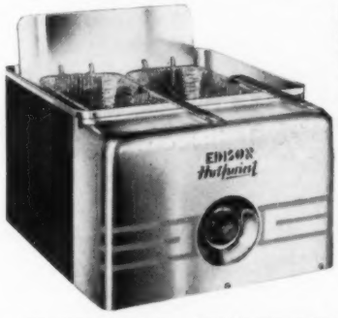

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⬅ **AUTOMATIC ELECTRIC FRY KETTLE.** This rectangular model equipped with drain. Two types: for counter or back bar; with floor stand; to fit into your main range bank.

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- Heat Manager holds temperatures *accurately*—recovers quickly to required frying temperature when cold food is put in.
- Automatic temperature control reduces fat absorption to minimum.
- Minimum fat capacity with maximum frying area—saves fat.

SCHOOL cafeteria directors have come to place great reliance on Edison-Hotpoint Automatic Electric Units because they enable a school to serve *quality* food at least cost. Cooking food the Hotpoint way means savings because you get perfect results every time. Since there is little or no food waste, these portable, automatic electric units literally *pay their own way!* For accurate cooking results, cleanliness and convenience, adopt a program now of replacing old equipment with modern Edison-Hotpoint electric units. May we send you full information without obligation? Edison General Electric Appliance Company, 5696 West Taylor Street, Chicago, Illinois.

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For sale through leading Kitchen Equipment Houses

COMMERCIAL ELECTRIC EDISON Hotpoint COOKING EQUIPMENT

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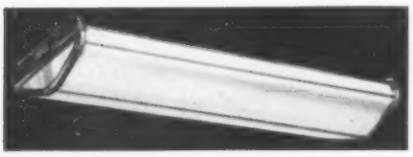
Convince Your Board!

Get More Light — Better Light — at Lower Cost!

Since ALL education is more or less VISUAL education; LEARNING BEGINS WITH LIGHTING!

To get the utmost value for your lighting dollar, get the whole story of the super qualities in GUTH Fluorescent! GUTH Lighting provides cool, brilliant, non-glaring illumination which is extra-easy on the eyes—comparable in color quality to true daylight! The engineered design of GUTH Fixtures puts light where it's needed — assures the proper quantity and quality of light—all at lower operating costs!



There are many models of GUTH Fluorescent Fixtures from which to choose. A typical one is shown above.

Send us detailed information on your lighting problems, and we will submit complete facts which will be interesting and helpful to you. No obligation!

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Leaders in Lighting Since 1902
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News in Review

Consumer Education

Business men and consumer educators can now take part in the same meeting without resort to high explosives. The third national conference on consumer education held at Stephens College early this month was a comparatively calm affair.

Business and advertising men—of whom there were few in attendance—went home feeling that the schools welcome intelligent cooperation from business, that business as a whole is not under attack and that by no means all advertising is mistrusted.

The teachers are strongly in favor of minimum standards for consumer goods, of differentiation between qualities of goods through identifiable grades or labels and of setting up a Department of the Consumer by the federal government.

Harriet Elliott, consumer commissioner of the National Defense Advisory Commission, told the conference of governmental efforts toward building economic literacy for consumers.

Fred Hecht, manager of the informative label and package division of Sears, Roebuck & Co., asserted that if school people are sincere in their desire to encourage further cooperation between business and consumer, they must teach consumers how to use these new informative labels.

SUMMER COURSES

Intercultural Workshop

Colorado State College of Education, the Service Bureau for Intercultural Education and the National Conference of Christians and Jews will collaborate in conducting a workshop of intercultural education during the summer session of the college. The workshop will be under the direction of Violet Edwards, educational director of the Institute for Propaganda Analysis, and will be devoted to a study of education and national defense. Eight hours' credit, both graduate and undergraduate, will be given for the course.

Conferences at Pennsylvania

The University of Pennsylvania has announced two conferences to be held on the campus during July. The Institute of Public Affairs will be held July 7 to 11 and part of the discussion will be devoted to the effects of a war-time economy on education.

The fourth annual educational conference, sponsored by the school of education, will convene July 14 to 17. The conference will deal with various aspects of the unification and coordination of educational programs. Speakers will include Miles Murphy, psychologist of the University of Pennsylvania; Fowler D. Brooks, DePauw University; Francis M. Garver and Helen Field of the University of Pennsylvania School of Education, and Reuben H. Price, superintendent of schools, Highland Park, Ill.

For the Education of Drivers

The American Automobile Association will sponsor seminars in driver education at four universities this summer. The first course will be held at the University of Pennsylvania, May 5 to 10; the second, at Iowa State College, Ames, May 19 to 24; the third, at the University of Texas, May 26 to 31, and the fourth, at the University of Washington, June 23 to 28.

The major function of the seminars will be to train teachers and college and university professors as instructors of similar courses in their own schools. No college credits will be granted nor will tuition fees be charged. All those who qualify in the course will be issued a certificate of teaching showing that the standards are acceptable to the American Automobile Association.

Elementary Curriculums

A special course on "Problems in Elementary Curriculum Making," will be offered at the University of Kentucky during the first term of the 1941 summer session, extending from June 16 to July 2. The course will be opened to any graduate student with at least one year's experience and will be conducted as a workshop.

Workshop in Radio

The radio council of the Chicago public schools is sponsoring a comprehensive workshop in radio to be held from June 30 to August 6. Major credit of four semester hours will be given. The schedule will include survey of radio, writing for radio, rehearsal and production of programs and the use of radio programs in the classroom. Classes will meet at the studios of the Radio Council at 228 North La Salle Street, Chicago. The fee for the course will be $20 plus $1 for registration.

Custodians Go to School

Kent State University, Kent, Ohio, will conduct its first summer school course for school custodians and main-

NOW AN RCA VICTROLA DESIGNED EXPRESSLY FOR SCHOOLS!

School use is the principal use for which this outstanding new instrument has been built. Its volume... its ease of operation... its fidelity of reproduction... and its price, all meet school requirements.

HERE'S the RCA Victrola for *your* schoolroom or auditorium! It's not an ordinary Victrola. It's an instrument *designed* for school use. An instrument that RCA Victor engineers have created in response to the expressed wishes of school principals, supervisors and teachers!

It has the volume you need for a large classroom or average auditorium—amplifier provides 10 watts output. It's amazingly simple to operate—for it has a newly developed automatic on-and-off switch which starts the turntable when the tone arm is moved toward the record. And its price is easily within the scope of even the most modest school budget.

Study this RCA Victrola's features. Hear this instrument and notice the warmth, the true fidelity of reproduction it provides. You'll say—"It's just what we need at the school!"

The Features Tell the Story!

RCA Victrola Model R-98 illustrated offers you these features:

Plays 10" and 12" records • Has constant speed induction motor with new automatic on-and-off switch • Top loading tone arm and automatic needle cup • 5-tube amplifier—10-watt output • 8" electro-dynamic speaker • New and improved pick-up • Handsome walnut cabinet.

RCA Victor has many other fine Victrolas—with or without radio—which are especially desirable for school use. Mail the coupon for a two-color descriptive folder.

Modern schools* stay *modern with RCA Radio Tubes in their sound equipment.

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SOUND SERVICE FOR SCHOOLS

Educational Department — RCA Mfg. Co., Inc., Camden, N. J.
A Service of the Radio Corporation of America

tenance employes, June 23 to 27. The school is a continuation of the one started three years ago by the East Cleveland board of education and will be directed by W. M. Councell, business manager of East Cleveland schools.

Practical demonstrations and discussions of as many phases of maintenance and custodial work as can be covered in the five day course will be presented by authorities in the field. Subjects to be covered include: steam boilers and pumps; care of school grounds; firing and operating a steam boiler; floor treatment and preservation; heating and ventilating, and modern plumbing.

A registration fee of $2 will be charged for the course. Meals and accommodations can be obtained near the university campus.

Educational Leadership

A series of five forums on the theme of "Educational Leadership in the Present Emergency" will be the basis of the twelfth annual school administrators' conference at Peabody College, Nashville, Tenn., June 19 to 21. Problems to be discussed at the forums will include: indications of a parallel system of schools provided by the federal government; vocational and technical education; maintenance of adequate and efficient educational personnel, and school finance. Administrators, principals, teachers, supervisors of instruction and officials of state departments of education are invited to attend the conference.

Four Regional Conferences

Regional conferences for supervisors, administrators, principals and teachers will be conducted at four universities this summer in cooperation with the department of supervisors and directors of instruction of the N.E.A. The programs scheduled are as follows: "How to Develop Wholesome Personality Through the School Program," Teachers College, Columbia University, July 7 to 19; "The Pupil, the Community and the Curriculum," University of Denver, July 7 to 18; "Life in the Rural Community," University of North Carolina, June 12 to July 19, and "Democratic Guidance of Teachers in the Modern School," University of California, July 14 to 25.

Reflecting World Conditions

An extensive program, with preparation for conditions arising from a world at war as the keynote, will be offered at the summer session of Mills College, Oakland, Calif. Features of the summer session will include the Institute of International Relations, to be held from June 22 to July 2, inclusive; a program of child development, and courses in home economics, art, music and adult education.

Intensive Training in Languages

Intensive courses in Spanish and Portuguese will be given by the American Council of Learned Societies, International Union of Academies, at a summer institute to be held on the campus of the University of Wyoming, June 23 to August 22. Each course will be limited to 30 registrants, who will not be required to have had previous training. Students will be encouraged to read works in the two languages that are pertinent to their special fields.

School Survey Legislation

In line with President Roosevelt's recent message to Congress recommending a six year program of long-range planning to provide for governmental activities to prevent an economic debacle after the completion of the defense program, Senator Josh Lee has introduced a bill (S. 906) providing for a program of federal aid in making surveys and studies of school plant needs and recommendations for programs of school building. The proposed legislation includes an

SPAL DOES 3 JOBS soap can never do!

Streaks and surface film vanish . . . dirt floats away. There's a sheen on the floor—lustrous—protective. With one sweep of the mop, your janitor completes 3 jobs soap can *never* do!

That's the sort of cleaning job Spal does. It's fast . . . it's thorough . . . it's *safe* to use . . . and it gives you economies that count.

That's because Spal's amazing formula offers an entirely new method of cleaning—a new expurging action that dissolves dirt, draws it to the surface, and *floats* it away.

But Spal does 2 extra jobs soap can *never* do. It polishes, and it protects. A specially developed light filler leaves a *lustrous film* that not only reveals the true beauty of the floor but also *guards the surface* from harm.

So get the facts about Spal. Make an actual "on-the-job" test and prove to yourself that Spal is made to give you *three times* more work, in less time, and at a lower cost, than any other cleanser you've ever used.

Cleans by the New Expurging Action!

Gives Floors a Lustrous Polish!

Leaves a Film of Surface Protection!

Spal is safe to use on all types of flooring. Approved by leading manufacturers.

The HUNTINGTON LABORATORIES Inc
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LIQUID SCRUB COMPOUND

annual appropriation for four years to be allocated to the states on the basis of school population. The money is to be expended by the states on the basis of a plan of procedure approved by the United States commissioner of education.

This bill has been referred to the committee on education and labor and may be considered at the same time that the presidential recommendations for long-range planning are studied by the Congress.

H.R. 1074 Approved

The board of directors of the American Camping Association recently took the following action regarding H.R. 1074: "Moved that this board approve the two principles in the Bill H.R. 1074, to wit: that as many children as possible shall have an opportunity for camping, and that camping shall be considered an educational institution; and that the matter be referred back to the sections for whatever action they wish to take on the bill individually."

Films in Review

A Boat Trip. 16 *mm., sound.* 400 *feet.* 1 *reel.* 12 *minutes. Erpi Classroom Films, Inc.,* 35-11 *Thirty-Fifth Avenue, Long Island City, N. Y. Subject: geography, reading, history and travel. Grades* 2 *to* 8. *Rating A—.*

Through the centuries man has found that it is more often easier and cheaper to travel by water than by land. Waterways have been the main entrance to unknown lands. In this film Nancy and Roger are taking a boat trip down the Hudson River. They inspect the ship from the pilot house to the engine room. While they are watching the scenery they see many different kinds of boats.

The captain shows them how the wheel turns the boat, then the children watch the huge engines driving their boat on its way. From the deck a lighthouse is shown and its purpose is explained. The other boats which they pass are: a yacht, a sail boat, a speed boat, a freighter, a fire fighting boat, the hospital ship and a trim square rigged vessel, a relic of the past, that is still being used. They also see a ferry, which carries automobiles, and the docking of the *Normandie.*

The photography is excellent, the sound is not distinct in some instances but the children's voices are clear. The pounding of the engines and the sound of the steam whistle are realistic.

This film would be excellent for a study of transportation by boat or an interesting motivating unit for story writing.—*Reviewed by* Paul V. Thornley.

Covered with blue REDO, Colonial Grain, these 826 Peabody Seats provide "comfort conditioning" that means more educational value from the auditorium in the George Rogers Clark School at Hammond, Indiana.

"Conditioning" pupils before auditorium activities begin is the key to "good reception" of the assembly program. Best means of comfort conditioning is CHASE REDO upholstery on modern auditorium seating.

Comfortable CHASE REDO curbs the tendency of adolescents to "act up". Its smoothly-grained surface discourages youthful vandalism. REDO upholstery on modern seating adds much to the educational value of auditorium activities... while its long-wearing quality is a boon to the school's budget.

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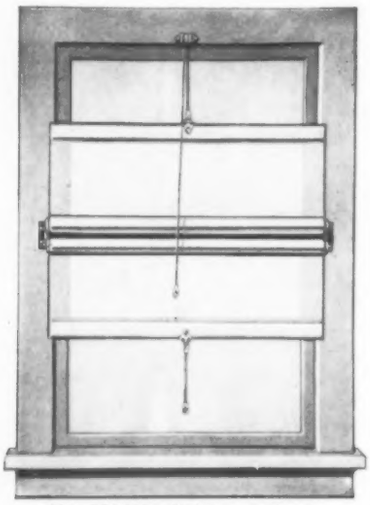
SAVE precious vision with proper shading

Defective vision in school age children is caused chiefly by faulty window shading. Only with double roller shades of a translucent material can you successfully control glaring sunlight. You get this eyesight protection for your pupils with Beckley-Cardy's SIGHTSAVER Double Roller Shade No. 105 NS. The efficient double roller mounting of this shade provides separate adjustment for shading the top and bottom sash.



No. 105 NS. Sightsaver Shade with Demountable Feature

Supertex Shade Material

Supertex is a translucent shade cloth that reduces glaring sunshine to a soft, glowing light. Supertex is a cotton duck material, vat-dyed to a soft, taupe color that is fadeproof and pleasing to the eye. It has no chemical or paint filler to dry out and crack. Supertex will outwear three shades of ordinary material.

FREE Supertex sample

See for yourself the pleasant color and translucent, long-wearing quality of Supertex. A generous sample of Supertex shade cloth is yours for the asking. Just drop a card or note in the mail today, while you are still thinking about it.

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1632 INDIANA AVENUE • CHICAGO

ANIMALS IN MODERN LIFE. 16 *mm., sound.* 400 *feet.* 1 *reel.* 12 *minutes. Erpi Classroom Films, Inc.,* 35-11 *Thirty-Fifth Avenue, Long Island City, N. Y. Subject: social science. Grades* 4 *to* 12. *Rating A.*

"Animals in Modern Life" is a movie that shows the economic importance of animals to man. It deals with the wide variety of uses to which animals are put in our modern civilization.

As an introduction the cave man is shown using animals, first for food and then for clothing and power. Today, we still have the same animals but man has specialized certain animals. This is illustrated by various species of cattle and chickens.

Many animals are pictured in their native surroundings to show more clearly the contribution of each. The elephant in India, the dog team in the Arctic, the camel in the desert are a few pictures to show power. The honey bee, cattle and fish illustrate food. Clothing is exemplified by the silk worm, sheep and cattle. The film concludes by showing that four fifths of the world's population still uses animals for power even though in our country the animals are being replaced by machines.

This picture is particularly valuable for use in social science in later elementary grades or in courses of geography or agriculture. In high school it can be used in economics, biology and home economics.—*Reviewed by* MARGARET STEVENSON.

Film Releases

Birthplace of America—A 16 mm. sound film depicting scenes, points of interest and birthplaces of America's great men and their ancestors. 1 reel, 16 mm. Pictures, Inc., 1600 Broadway, New York City.

Elementary Operations on the Engine Lathe—New sound film designed for schools now teaching or planning to teach shop practice in connection with the national defense program. Topics include procedures involved in facing, straight turning and squaring a shoulder, as well as working to dimensions from a mechanical drawing. 1 reel, 16 mm. Eastman Kodak Company, Rochester, N. Y.

Conquest of the Air—A documentary film tracing the history of aviation and telling by means of pictures, animated diagrams and dialog how man flies and how he learned to fly. 16 mm., sound. Films Incorporated, 330 West Forty-Second Street, New York City.

Exploring With X-Rays—This film tells in simple language the story of x-rays and their various applications in both medicine and industry. 4 reels, 16 and 35 mm. General Electric X-Ray Corporation, 2012 Jackson Boulevard, Chicago.

Youth Lends a Hand—A film surveying the activities of eight of the volunteer work camps conducted by the American Friends Service Committee during the summer of 1940. 2 reels, 16 mm., silent. Division of Visual Experiment, Harmon Foundation, Inc., 140 Nassau Street, New York City.

Control of Body Temperature—Laboratory demonstrations, animated drawings and special photography illustrate phenomena associated with variations of body temperature in man and animals. Produced in collaboration with Drs. A. J. Carlson, H. G. Swann and F. J. Mullin, University of Chicago. 16 mm., sound. Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

Coming Meetings

April 30-May 3—N.E.A. Department of Health, Physical Education and Recreation, Atlantic City, N. J.
May 1-3—Eighth Annual National Folk Festival, Constitution Hall, Washington, D. C.
May 2-7—Eastern Music Educators Conference, Atlantic City, N. J.
May 5-9—American Association of University Women, Cincinnati.
May 5-11—National Music Week.
May 19-22—National Congress of Parents and Teachers, Boston.
May 21-28—National Board of Fire Underwriters, New York City.
June 19-21—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.
June 20-21—Ohio Education Association, Cedar Point, Ohio.
June 22-July 13—California Adult Education Workshop, Mills College, Calif.
June 29-July 3—National Education Association, Boston.
July 8-12—Association for Childhood Education, Child Study Conference, Oakland, Calif.
Oct. 9-11—Utah Education Association, Salt Lake City.
Oct. 16-18—Wyoming Education Association, Cheyenne.
Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.
Oct. 22-25—New Mexico Educational Association, Albuquerque.
Oct. 23-24—New Hampshire State Teachers Association, Nashua.
Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.
Oct. 24-25—Maryland State Teachers Association, Baltimore.
Oct. 29-31—West Virginia State Education Association, Charleston.
Oct. 29-31—North Dakota Education Association, Minot.
Oct. 29-31—Maine Teachers Association, Bangor.
Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.
Nov. 6-8—Conference of Food Service Directors, New York City.
Nov. 6-8—Iowa State Teachers Association, Des Moines.
Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.
Nov. 7-9—New Jersey Education Association, Atlantic City.
Nov. 13-15—Arizona Education Association, Phoenix.
Nov. 18-21—Virginia Education Association, Richmond.
Nov. 20-22—Texas State Teachers Association, Houston.
Nov. 26-29—Missouri State Teachers Association, St. Louis.
Dec. 29-31—Pennsylvania State Education Association, Harrisburg.
Dec. 29-31—Illinois Education Association, Chicago.

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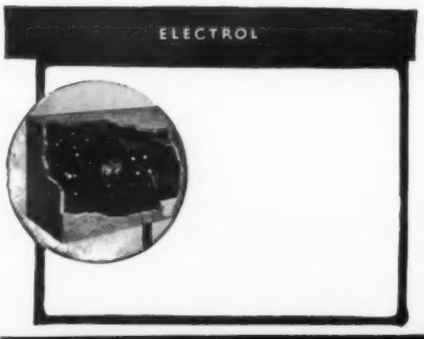

Belvidere Public Schools
Belvidere, Illinois

R. E. GARRETT, SUPERINTENDENT OF SCHOOLS — FLOYD E. BRETT, HIGH SCHOOL PRINCIPAL

January 27, 1941

Da-Lite Screen Co., Inc.
Chicago, Illinois

Dear Sir:

Almost a year ago we installed in our auditorium-gymnasium a 12' by 16' Electrol Screen. It has proven very satisfactory and is giving excellent results.

Recently a world-renowned explorer who lectured here and showed colored moving pictures said that we would not be able to project at 100' and cover the screen with sufficient brilliancy at 750 watts power. However, we succeeded, and the pictures were truly brilliant.

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Yours very truly,
Wilbur S. Mong

Wilbur S. Mong
Director of Visual Education
Belvidere High School

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THE DA-LITE SCREEN COMPANY, INC.

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On the Air During May

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System, the Mutual Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Sundays

11:30 a.m.-12:00 noon—Music and American Youth (NBC Red).

12:15-12:30 p.m.—I'm an American. A series devoted to expositions by distinguished naturalized Americans of the privileges and responsibilities of the democratic way of life (NBC Blue).

12:30-1:00 p.m.—Pageant of Art. The dramatic story of fine arts through the ages (NBC Red).

1:30-2:00 p.m.—On Your Job. Dramas of America's work and workers, based on research by Frank Ernest Hill of the American Association for Adult Education (NBC Red).

1:30-2:00 p.m.—Sundown on the Veldt. Josef Marais in folk songs of the African Bushveld (NBC Blue).

1:30-2:00 p.m.—March of Games, Nila Mack, director (CBS).

2:00-2:15 p.m.—American Pilgrimage. Broadcasts from the homes of famous American authors (NBC Blue).

2:00-2:30 p.m.—Free Company Broadcasts (CBS).

2:15-2:30 p.m.—Foreign Policy Association Program (NBC Blue).

2:30-3:00 p.m.—University of Chicago Round Table (NBC Red).

3:00 p.m.—New York Philharmonic-Symphony Orchestra. Directed by John Barbirolli. Deems Taylor, commentator (CBS).

3:00-4:00 p.m.—Great Plays. A series of masters' works tracing the development of drama (NBC Blue).

8:00 p.m.—Columbia Workshop. Produced by Douglas Coulter, CBS director of broadcasts.

Mondays

2:30-3:00 p.m.—Rochester Civic Orchestra (NBC Blue).

9:00-9:30 p.m.—News Exchange. Board of commentators including H. V. Kaltenborn, John W. Vandercook, Lowell Thomas and John Gunther analyze the news (NBC Blue).

10:30-11:00 p.m.—Cavalcade of America (NBC Red).

Tuesdays

2:30-3:00 p.m.—United States Army Band. Capt. Thomas F. Darcy, conductor (NBC Blue).

3:45 p.m.—American Transition (CBS).

9:30-9:55 p.m.—Unlimited Horizons (NBC Blue).

9:30-10:00 p.m.—Invitation to Learning, Huntington Cairns, chairman (CBS).

Wednesdays

2:15-2:30 p.m.—Echoes of History. General Federation of Women's Clubs, producer (NBC Blue).

3:45 p.m.—Children Also Are People (CBS).

8:00-8:30 p.m.—Quiz Kids. These children from the schools of Chicago and vicinity, all under 15, reveal an amazing fund of information (NBC Blue).

10:30-11:00 p.m.—Doctors at Work. Sixth annual health series presented by the American Medical Association (NBC Blue).

Thursdays

12:00 noon-12:15 p.m.—Conservation Reporter (MBS).

3:45 p.m.—Adventures in Science. This program is planned in conjunction with Science Service (CBS).

6:30-6:45 p.m.—Speaking of Liberty, Rex Stout, chairman. Authors, editors and journalists discuss phases of democracy and its function (NBC Red).

9:35-10:30 p.m.—America's Town Meeting of the Air (NBC Blue).

10:30-11:00 p.m.—The Listeners' Playhouse (NBC Red).

Fridays

2:00-3:00 p.m.—Music Appreciation Hour. Directed by Walter Damrosch (NBC Blue).

3:45 p.m.—Exploring Space (CBS).

4:15-4:45 p.m.—University Life (MBS).

11:15-11:30 p.m.—The Story Behind the Headlines. Produced in cooperation with the American Historical Association. Cesar Saerchinger, commentator (NBC Red).

Saturdays

12:00 noon-12:25 p.m. — American Education Forum. Designed to interest laymen as well as educators (NBC Blue).

12:30 p.m.—Highways to Health (CBS).

12:45 p.m.—Jobs for Defense (CBS).

1:00-1:30 p.m.—Let's Pretend. Nila Mack (CBS).

2:30-3:00 p.m.—Of Men and Books. Prof. John T. Frederick, Northwestern University (CBS).

5:00-5:30 p.m.—The World Is Yours. Produced in cooperation with the U. S. Office of Education and the Smithsonian Institution (NBC Red).

7:00 p.m.—People's Platform. Round table discussion of social, economic and political problems. Lyman Bryson, chairman (CBS).

7:00-7.30 p.m.—Defense for America. Produced by National Association of Manufacturers, covering all phases of defense production (NBC Red).

8:15-8:30 p.m.—Man and the World. Produced in cooperation with the Chicago Museum of Science and Industry and the American Museum of Natural History of New York. A new series devoted to the men of science and their achievements (NBC Blue).

9:35-11:00 p.m.—NBC Symphony Orchestra (NBC Blue).

[1]Except Sunday.

THE WORDS "or Equal" WILL NEVER GET YOU

HYLOPLATE Quality

nor will they get you those extra years of satisfactory performance which Hyloplate has been giving the schools of America since 1885 . . . economical, long-lasting OLD RELIABLE HYLOPLATE gives you a velvety writing surface that registers a clear, uniform chalk mark . . . Hyloplate never reflects light . . . is easy on the eyes. Let us tell you how economically you can replace unsatisfactory boards with fresh Hyloplate . . . either leaf green or black. Address Dept. NS-541.

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COMBINED WITH RADIO AND PHONOGRAPH

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This splendid model is ideal for general school recording and entertainment use. It's a complete recorder-radio-phonograph combination finished in airplane style luggage covering. Two-waveband radio unit has seven tubes, wave-trap for reduced interference, and built-in antenna connection. Recording unit has automatic tone control and crystal type mike. Phonograph unit with crystal type pickup plays back home recordings as well as all professionally made discs. High quality audio system and low resistance speaker serve all three units. All units are push-button controlled. Size—22″ x 13½″ x 12″—makes it readily portable. List price, $79.95, F.O.B. factory. See it at your nearest dealer.

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Here is Wilcox-Gay's answer to the most exacting demands of professional musicians and enthusiasts of home recording. RECORDIO-PRO is a versatile recorder-playback-radio combination of portable sectionalized construction. It records at standard 78 r.p.m. or 33⅓ r.p.m. Master unit used with two turntables as shown above makes possible copying and continuous recording. Price, Master unit (center) with one turntable unit, $150 F.O.B. factory. Extra turntable unit, $50. See RECORDIO-PRO at your nearest dealer.

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Educators praise this new Bell & Howell quarterly devoted wholly to their interests. Two issues have appeared, the second 50% larger than the first. It's FREE where school projectors are registered with B&H. Get on the mailing list now! Register by filling in the coupon fully.

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INSTRUCTION

Textbook Trouble

The textbook scrap continues with diminished volume but with unattenuated vigor.

Prof. Harold Rugg's social science textbooks during the month won the whole-hearted approval of the board of education of Evanston, Ill., Chicago's nearest north suburb.

The Philadelphia board of education approved the books on March 6 and won from the *Philadelphia Record* the following expression of commendation: "The decision by the school board in Philadelphia . . . is one of the most important since the famous controversy began. There can be no better answer to those hysterical patriots who see a Red or a Nazi every time they look into a clothes closet or under the bed."

The Guardians of American Education continued its attacks on Rugg's "new social order" and declared in its publicity that the books have been dropped by school boards in scores of communities from Vermont to California.

The National Council for the Social Studies, a department of the N.E.A., has prepared a packet of materials on "Selection and Use of Social Studies Textbooks: Cases and Suggestions," which is available to teachers who find themselves obliged to meet lay attacks on social studies textbooks.

The materials include summaries of recent attacks on textbooks; reprints of articles and professional statements on the issue; bibliographies, and a casebook containing reports of how teachers have met textbook attacks, together with specific suggestions for procedure.

Defense Takes Precedence

A plan to give priority to courses in defense training in vocational schools throughout the country has been announced by Sidney Hillman, associate director general of the Office of Production Management. The U. S. Employment Service will make recommendations to the local schools as to the types of defense occupations in which trained workers are needed, together with the number of persons to receive this training.

Classes for fitting workers into defense occupations will be set up to meet the conditions known to the state public employment offices, and training methods will be developed to meet specific defense labor needs in localities where shortages of skilled workers are arising.

Using the facilities of the 1500 state and local offices of the U. S. Employment Service, workers in a given area will be referred from local employment office lists to training in the schools and for later essential defense jobs.

The plan has been devised to coordinate defense training for unemployed workers with specific employer needs. It has been approved and signed jointly by John W. Studebaker, U. S. commissioner of education, and Ewan Clague, director of the bureau of employment security of the Social Security Board.

Lighting Efficiency Stepped Up

Increased lighting efficiency has been achieved at Glassboro Teachers College, Glassboro, N. J., by arranging the classroom seats in diagonal order instead of in the customary vertical or horizontal lines, it was reported in the March issue of the *New Jersey Educational Review*. Use of a standard illumination meter revealed that with the diagonal plan every desk now receives more than the minimum amount of light, although more than half of them were insufficiently lighted under the old arrangement.

Secondhand Tools for Schools

Permission to buy secondhand machinery and tools for use in training vocational school pupils in defense trades

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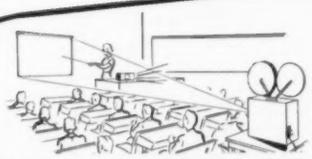

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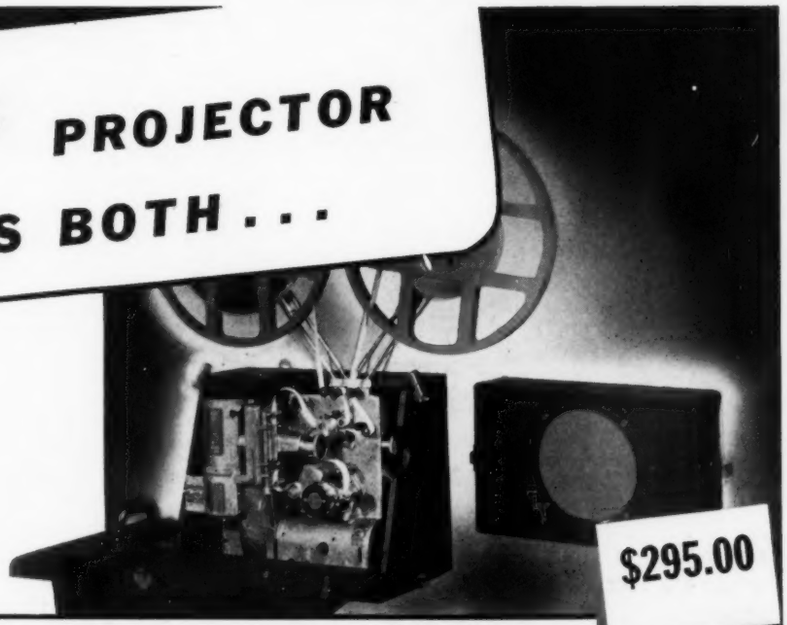

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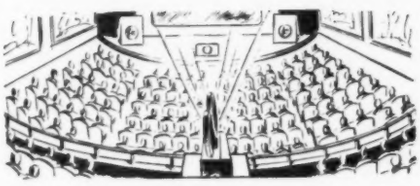

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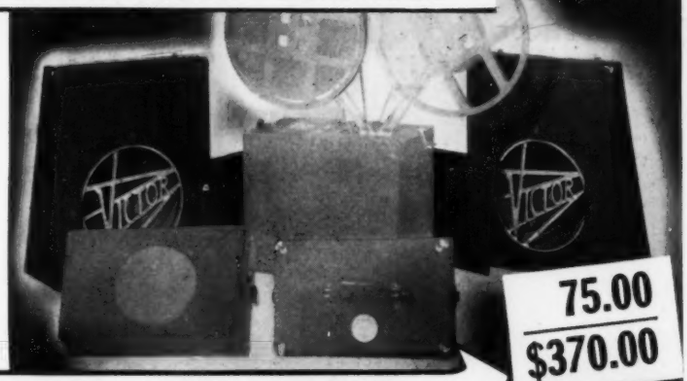

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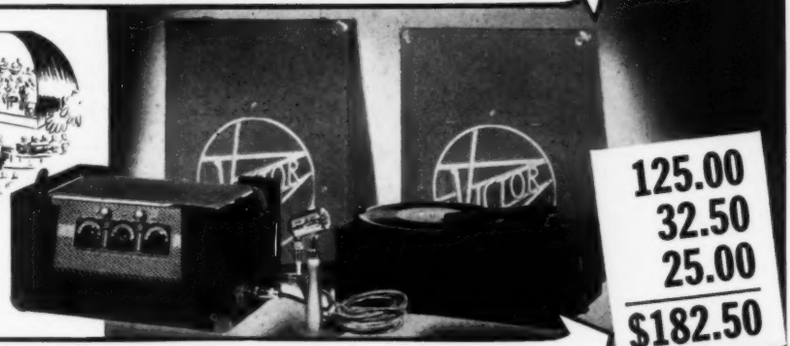

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was granted to the New York City board of education by the board of estimates recently when it was found that there is a shortage of this type of equipment because of the national defense program. A sufficient amount of used machinery and tools can be obtained through federal authorities to carry on the work of the vocational defense program. The equipment will be purchased with city funds or, if they become available later, with federal funds.

Pupils Investigate Government

Junior and senior pupils at Withrow High School, Cincinnati, are enthusiastic about an elective one-semester course in principles of democratic government. Inaugurated three years ago as an experiment, the course affords an opportunity to make an intensive study of constitutional government, using pamphlet materials and the discussion approach to local, state and national government problems. Interest in the course has become so keen that pupils voluntarily meet after class hours to continue their discussions.

Good Neighbor Policy

Seventy-three boys and girls of the graduating class of the Indian School, Albuquerque, N. M., will set forth on a good will tour to Mexico on May 15. The pupils have earned $1500 of the $2000 needed to finance the trip by operating a school canteen and weaving rugs and tapestries to sell to tourists. The purpose of the trip, as stated by Harrison Yazzie, 19 year old Navajo, who is class president, is "to understand our cousins in Mexico better and to let them learn something about us."

Additional Funds for N.Y.A.

A supplemental appropriation of $21,955,000 to carry on the National Youth Administration out-of-school work program has been allocated among the 48 states, Puerto Rico and the District of Columbia. The appropriation is designed to enable the N.Y.A. to maintain a high level of employment among out-of-school youths in shop and mechanical production work, with special emphasis on defense jobs. Young people will be employed as sheet metal workers, welders, automotive repair and aviation mechanics and woodworkers.

Teachers' Unions Fight Charges

The entire 32 page April issue of the *American Teacher*, monthly publication of the American Federation of Teachers, was devoted to the official charges on which is based the proposed expulsion of teachers' union of the city of New York, local 5 of the federation, the New York college teachers' union, local 537, and the Philadelphia teachers' union, local 192, and the joint reply from the three unions.

The first section of the magazine contains the 15,000 word statement of the executive council. The three principal charges are: (1) that the 1938 convention of the Communist party of New York State referred to the teachers' union as "our local"; (2) that a former member of the central committee of the Communist party has made affidavit that the executive boards of the New York locals are virtually controlled by Communist factions, and (3) that analysis of the official publication of the teachers' union reveals that the publication has allegedly adhered to Communist party principles.

The joint reply of the three locals, which comprises the second section of the magazine, categorically denies all of the charges of the executive council and affirms that all three organizations have contributed materially to the growth and development of the federation.

Campaign Against Vandalism

Superintendents, principals, directors and heads of bureaus of New York City schools have been asked to cooperate in a campaign against the destruction of school property. The request was made in a circular letter issued recently by Stephen S. Jackson, director of the bureau for the prevention of juvenile delinquency, who is a justice of the Domestic Relations Court of New York City. Judge Jackson announced that a contest will be conducted between April 1 and September 30 to eliminate vandalism and reduce the destruction of school property.

Schools that enter the contest will devise their own programs, which may take the form of plays, writing compositions or essays, displays of posters and illustrations, or the organization of committees to preserve school property.

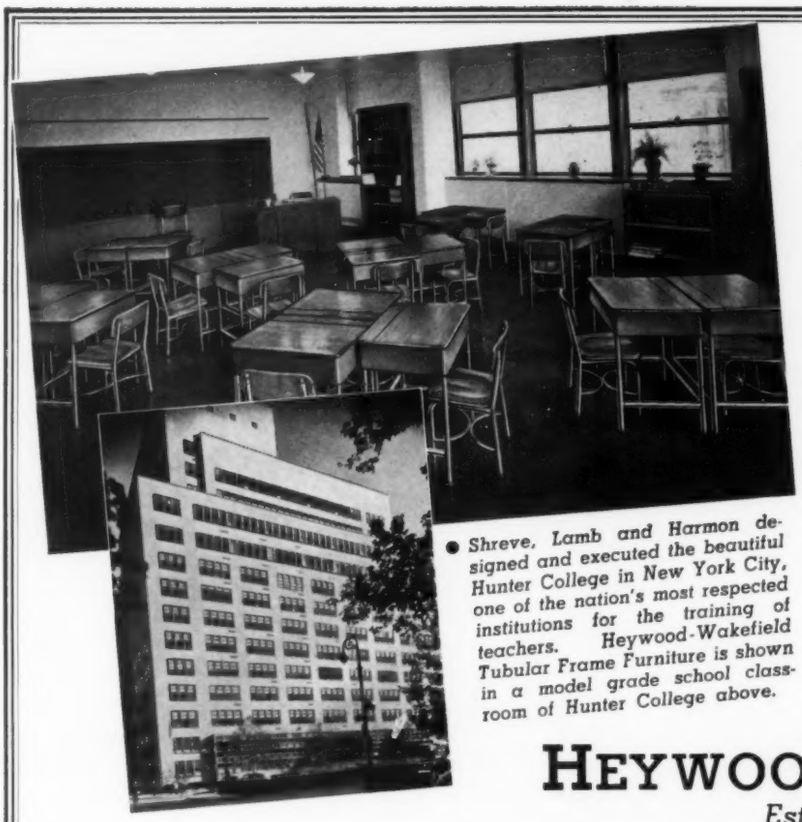
MEETINGS

Schoolmen's Week

Nearly 8000 school teachers, administrators and patrons attended the meetings of the twenty-eighth annual Schoolmen's Week of the University of Pennsylvania, March 26 to 29. This conference is sponsored jointly by the university, local school districts and the southeastern district of the Pennsylvania State Education Association.

Council on Education

The American Council on Education's twenty-fourth annual meeting will be held at the Mayflower Hotel, Washington, D. C., May 2 and 3. The relation of the schools to the national defense



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If you have a school seating problem, may we help you to solve it correctly and economically? Heywood-Wakefield's 115 years of experience in the seating field will prove invaluable whether you are interested in a single classroom or an entire school. We shall be pleased to offer assistance without cost or obligation.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

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program will be discussed at the two day session. Speakers will include W. H. Pillsbury, president, American Association of School Administrators, and Clarence A. Dykstra, chairman of the National Defense Mediation Board. The annual report of the president of the council will be presented at the Friday morning meeting by George F. Zook.

Radio Education Institute

Educators, civic leaders and broadcasters will gather in Columbus, Ohio, May 4 to 7, for the twelfth annual institute for education by radio. The five general sessions will cover the following subjects: radio in the current crisis; documentary radio programs; radio and cultural relations with the Americas; radio in war time, and a demonstration of a production by a local station.

International Education

The first international conference of the New Education Fellowship to be held in the Western Hemisphere will meet at the University of Michigan July 6 to 12. Plans for the conference are being developed by educators in the United States, Canada and Mexico. Representatives will be brought from each of the South American republics and students, scholars and leaders from European countries, who are now in the United States, will participate. The program will include two general sessions daily at which leaders from various nations will discuss educational problems and present the latest developments of education in their respective countries.

ANNIVERSARIES

"I Am an American"

May 18 will mark the third annual celebration of "I Am an American" Day, in accordance with a proclamation made by President Roosevelt. The day is to be observed in recognition of citizens who have attained their majority or have been naturalized during the past year. Ceremonies and celebrations will be sponsored by civic clubs, patriotic organizations and schools.

NAMES IN NEWS

Superintendents

DR. CHARLES C. SHERROD, president of East Tennessee State Teachers College at Johnson City since 1925, has been elected superintendent at Knoxville, Tenn., to succeed DR. HARRY CLARK.

R. H. LICKING has been appointed superintendent at Ripon, Wis.

D. EVERETT THOMAS has been released as superintendent at Elkland, Mo., to go to Sarcoxie, Mo., as superintendent.

PHILIP WESNER has succeeded ELLIS BELL as superintendent at Winchester, Ind. Mr. Bell is assistant state superintendent of public instruction in Indiana.

T. K. OWENS, superintendent of Jackson city schools, Jackson, Ohio, for the last five years, has been reelected for another five year term.

BYRON STOER has been voted a new contract as superintendent of schools, Monroe Township near Five Points, Ohio.

W. DENNIS PERKINSON, assistant principal of Portsmouth High School, Portsmouth, Ohio, has been chosen to succeed FRANK APPEL, who will retire this spring after thirty-three years as superintendent of Portsmouth High School.

GEORGE A. BOWMAN, superintendent at Lakewood, Ohio, has been elected superintendent at Youngstown, Ohio. He succeeds PLINY H. POWERS, who resigned to join the faculty of New York University.

ROBERT ROSS, superintendent at Monticello, Ind., has been ordered to Camp Wheeler, Ga.

RAYMOND B. CRAIG has been elected superintendent of schools of Lostcreek

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Here's another Vulcan exclusive—the new enamel-lined, double-decker oven! A big 26x28x15 all-purpose oven. *Pans can be placed directly on the oven bottom* where they cook perfectly without shifting. A solid rack divides this oversize oven into two evenly heated compartments and doubles the cooking capacity on same gas consumption.

Automatic oven heat control makes big fuel savings, drastically reduces meat shrinkage, yields as much as 14 additional ½ lb. servings from 50-lb. roasts.

Thick insulation prevents heat waste, keeps kitchens cooler. Extra heavy oven door construction.

It will pay you to investigate Vulcan equipment for new or modernized kitchens.

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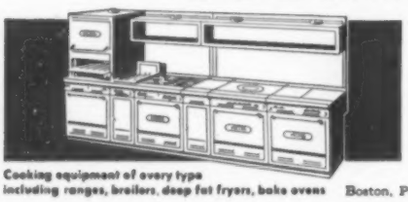

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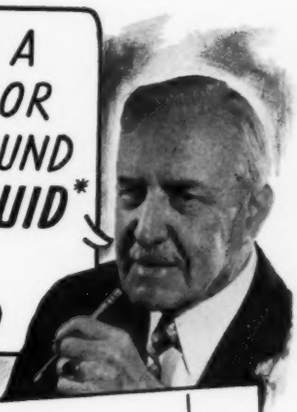

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Township near Troy, Ohio, to succeed EMMERT FLORY.

JOHN CALLAHAN, veteran state superintendent of schools in Wisconsin, in a recent election defeated two opponents for the office by a substantial margin.

N. BERTON ALTER will retire on August 1, after serving nearly thirty years as district superintendent of schools of the first supervisory district, which comprises the towns of Canajoharie, Minden, Palatine, Root and St. Johnsville, New York.

H. P. CLEMONS has been appointed superintendent at Lockney, Tex., for a two year term.

ALDEN W. ALLEN has been elected superintendent of the school district that comprises Rockland and Rockport, Me., to succeed GEORGE J. CUMMING.

H. C. WISEMAN, high school principal at Burlington Junction, Mo., has been released from his position to accept the superintendency at Quitman, Mo.

H. W. THOMAS, former superintendent of schools, New Britain, Conn., has been named state supervisor of national defense education with headquarters at New Haven.

DELBERT M. DOLPHIN, for the last two years principal of the Lena-Conover High School, has been elected superintendent at Conover, Ohio, for a three year term.

W. H. TATE, superintendent of schools of Atlantic, Iowa, since December 1938 will resign that position at the end of the school year.

County Superintendents

DONALD UPSON has been elected superintendent of schools in Rock County, Wisconsin.

F. D. RING has been appointed superintendent of schools, Muskingum County, Ohio, for a five year term.

C. E. OXLEY, superintendent at Belle Center, Ohio, for five years, will become superintendent of schools, Logan County, Ohio, on August 1.

KURT R. SCHOENOFF has been elected superintendent of schools, Sauk County, Wisconsin.

DR. E. R. VAN KLEECK, superintendent of schools at Grosse Pointe, Mich., has been re-engaged for a second three year term.

Private Schools

REV. DR. FREDERICK HERBERT SILL, founder and headmaster of the Kent School, Kent, Conn., has resigned because of illness. He was named headmaster emeritus. The REV. WILLIAM SCOTT CHALMERS, acting headmaster, is his successor.

WARREN R. SARGENT, director of admissions at Worcester Academy, Worcester, Mass., has resigned to become director of Howard Seminary, West Bridgewater, Mass.

E. FRANCIS BOWDITCH has resigned as headmaster of Park School, Indianapolis, and JOHN R. CALDOW, for many years assistant headmaster, has been named his successor. Mr. Bowditch will become headmaster of Lake Forest Academy, Lake Forest, Ill., succeeding JOHN WAYNE RICHARDS.

Principals

C. SPENCER CHAMBERS has been appointed principal of Lincoln School, Syracuse, N. Y., to succeed the late JAMES A. SHEA.

ELMER O. HOFFMAN has retired as principal of Nott Terrace High School, Schenectady, N. Y. He had been a member of the faculty for thirty-four years. LLOYD S. MICHAEL has been appointed successor to Mr. Hoffman.

A. SEELEY HUTCHINSON, supervising principal of Mendham Borough and Mendham Township schools, Mendham, N. J., has notified the board of education that he will retire June 30.

RAYMOND A. FORGIE, supervising principal, Stoystown, Pa., has been elected the new principal of the Enola High School, Enola, Pa.

F. E. DEGELLEKE, for thirty-five years a principal at Sea Cliff, N. Y., has announced his resignation.

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New Beauty and Efficiency

Bradley's ***semi-circular*** enameled iron and stainless steel Washfountains are streamlined and handsome, yet economical, space-saving, sanitary.

Like the full-circular models, these semi-circular Washfountains are available in 54" and 36" diameter sizes accommodating 5 and 3 users, respectively. They are particularly popular for offices, schools, hospitals, stores, shops.

In addition to the De Luxe model illustrated, standard units with either plain apron or roll rim bowls are available. All models may be had in enameled pressed iron and solid or clad stainless steel, hand or foot-controlled.

Let us send you further information. Ask for specifications covering Types E-H and E-F. BRADLEY WASHFOUNTAIN CO., 2207 West Michigan St., Milwaukee, Wisconsin.

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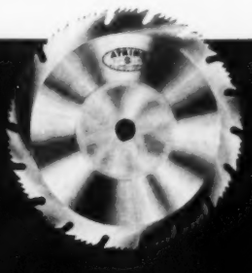
BOYS will be BOYS

- The best pupil is as careful of school equipment as he can be, but in a boy's rough-and-tumble life, even that is hard on saws. It is better policy anyway to buy with those few *worst* pupils in mind.

Specify "ATKINS"

and Your Buys Will be BUYS!

That's why the experienced instructor is likely to requisition, in all types of saws, "Atkins Silver Steel"—and the school purchasing department to anticipate by standardizing on Atkins.



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All standard sizes and tooth patterns are available in the Atkins Silver Steel Line—plus the remarkable series of Clearance Grind Saws "dished" back from the tooth edges so that there is an actual clearance between both saw faces and the work.

BANDS
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KNIVES

HAND SAWS (All Types)
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METAL SAWS (All Types)

THE ATKINS "2000"

No. 2000 is modern in design in genuine Silver Steel with uniform tempering, which more than assures increased edge-holding qualities. New pattern apple handle with Perfection hang. Grip is closer to blade and gravity center of saw thus requires less effort to use.

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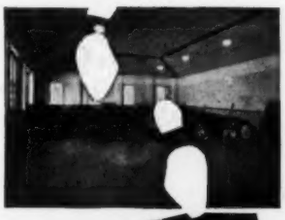
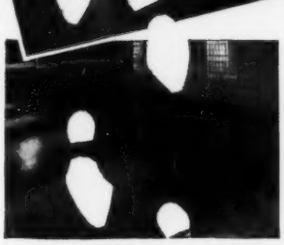
ATKINS *Silver Steel* SAWS

PYRA-SEAL

THE ONE-TWO PUNCH THAT KNOCKS THE LABOR AND COST OUT OF WOOD FLOOR MAINTENANCE





When you seal your wood floors with PYRA-SEAL, you win both ways. You get a floor that *looks* beautiful . . . and one that *stays* beautiful – with the very minimum of maintenance labor and expense.

PYRA-SEAL is the preferred floor seal in hundreds of the nation's leading schools because it defeats traffic wear – even in those rooms where heavy traffic is an hour after hour occurrence.

PYRA-SEAL BEAUTY IS EASILY MAINTAINED

Once floors are correctly sealed with PYRA-SEAL they retain their lustrous beauty for years, requiring only mopping or dusting to remove surface grime. And because PYRA-SEAL prevents traffic lanes from forming *it also prevents floor destruction from starting.*

Get ALL These Advantages—PYRA-SEAL – the perfect wood floor seal – dries to a hard, lustrous yet non-slip finish. Resists hot and cold water, acids, alkalis, and ink. The most practical and economical seal for all wood floors. Why accept less than what PYRA-SEAL protection can give you.

Approved and recommended by the Maple Flooring Mfrs. Assn., National Oak Flooring Mfrs. Assn., and specified by leading architects.

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Gives complete information on PYRA-SEAL treatment and other Vestal products that save time, money, and labor in floor maintenance. Write for your copy today.

VESTAL CHEMICAL LABORATORIES, INC.
ST. LOUIS NEW YORK

DAVID BARNES, principal at the Fourth Ward School, Eau Claire, Wis., was appointed principal of the Eau Claire Senior High School recently. He succeeds SAM G. DAVEY, who resigned to accept a position as director of vocational education at Eau Claire.

RICHARD L. HENDERSON has been appointed principal of the high school at Shortsville, N. Y.

ELSIE BOWERS has been named principal of Mount Pleasant Street School, Nashua, N. H.

WILLIAM D. FIRMAN, who has been head of the social science department of Richmondville Central School, Richmondville, N. Y., for the last two years, has been appointed principal of the school, succeeding MERRITT BIDWELL.

BERNARD F. WILSON recently was elected principal of the high school at Addison, N. Y.

SAMUEL S. RICHMOND was recently appointed principal of the junior high school at Concord, N. H.

MARY H. TRIPP, junior high school counselor, New Bedford, Mass., has been elected principal of the Charles S. Ashley School, New Bedford.

MRS. ARTHUR B. SICKLES has been named supervising principal at Fair Haven, N. J.

ROBERT GRANT WALKER has been named principal of Memorial School, Middletown, N. Y., succeeding KENNETH O. FRASIER, who resigned.

MOLITA SPECK has been named principal of the Westons Mill School, New Brunswick, N. J.

A. HERBERT CAMPBELL was recently reappointed principal of the Highland Union School District, Highland, N. Y.

HAROLD E. JOHNSON, former head football coach at Millikin University, Decatur, Ill., has been appointed head of the Illinois Boys' School at St. Charles.

In the Colleges

HELEN D. BRAGDON, for three years dean of Hood College, Frederick, Md., has been named president of Lake Erie College, Painesville, Ohio. She succeeds DR. VIVIAN B. SMALL, who is retiring.

DR. HERMAN LEE DONOVAN, president of Eastern Kentucky State Teachers College, Richmond, Ky., for the last thirteen years, was elected president of the University of Kentucky at the April meeting of the board of trustees. Doctor Donovan succeeds THOMAS P. COOK, who has been acting head of the university since the retirement of PRESIDENT FRANK L. MCVEY last July.

DEAN A. C. BAUGHER has been elected president of Elizabethtown College, Elizabethtown, Pa., to succeed RALPH W. SCHLOSSER, who resigned effective July 1.

ANSON B. HANDY, superintendent at Plymouth, Mass., has been appointed president of Hyannis State Teachers' College, Hyannis, Mass. He succeeds the late HERBERT H. HOWES.

Deaths

JOHN MUNN ROWELL, 70, principal of the Browne Junior High School, Malden, Mass., died suddenly of a heart attack at his home.

RAYMOND L. SKINNER, 38, superintendent of schools, Caldwell, Ohio, died in a private hospital at Columbus, Ohio, of pneumonia.

JOHN C. HALSEMA, superintendent at Minster, Ohio, died recently following a month's illness.

GERTRUDE A. HICKMAN, principal of Frances Willard Elementary School, Rock Island, Ill., died recently of a cerebral hemorrhage.

DR. JOHN PEARSON CUSHING, former principal of New Haven High School, New Haven, Conn., and headmaster of Hamden Hall, died April 6.

Miscellaneous

DR. W. T. SPANTON, who has been federal agent for agricultural education in the Pacific region for the last sixteen years, has been named chief of the agricultural education service, U. S. Office of Education. He succeeds J. A. LINKE, who retired on March 31.

MODERN SCHOOL ESSENTIALS FOR DOUBLE PROTECTION OF BOTH PERSONNEL AND BLACKBOARD EQUIPMENT

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DUSTLESS
WHITE CRAYON

These finest quality Gold Medal White Blackboard Crayons are entirely free from irritating dust and other gritty particles. Now available by the gross in quarter-gross packs as shown.

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WITH SORTING RACK INSERT

● Every progressive school will find many practical uses for this attractive, big capacity steel cabinet. It is the ideal storage unit for all sorts of equipment used constantly by superintendents, principals and teachers.

The Sorting Rack Insert represents a big step forward in storage cabinet usefulness. Because its shelves are hand adjustable, it may be used as: (1) A Stationery Storage Unit; (2) A Work Organizer; (3) An Examination Paper Distributor; (4) A Magazine Holder. Each shelf has a label holder, placed to simplify filing and reference.

Other outstanding features of this new Lyon Cabinet include rounded edges, smooth front and sides—free from bolt heads, full swinging doors, and exceptional storage capacity per square foot of floor space occupied. Consult your school supply distributor, or write us, for full details and attractive price.

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SCHOOL EQUIPMENT

LYON METAL PRODUCTS, INCORPORATED, Aurora Illinois

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Here Is "Built-in" Protection With

PERMA-SEAL

The Penetrating Seal For All Wood Floors

No longer is it necessary to rely on surface applications or coatings . . . with their constant exposure to the effects of chipping, cracking, wearing . . . to safeguard wood floors and preserve their beauty and utility.

Now, Consolidated brings you "built-in" protection with Perma-Seal . . . the penetrating floor sealer. Perma-Seal is the 1941 floor treatment for all wood floors . . . new or old. It seals the life into the wood because it penetrates deep into it—right into the cells, fibers, and pores, binding them together into a hard, wear-resisting, moisture-impervious formation. Perma-Seal provides the ideal protection for floors in school rooms, halls, auditoriums, gymnasiums . . . wherever heavy traffic is present.

Perma-Gym Seal Over Perma-Seal
The Ideal Treatment for Gymnasium Floors

The combination of Perma-Gym Seal, the tough, elastic surface finish over penetrating Perma-Seal, is the new method of floor treatment for gymnasiums . . . the treatment developed in the Consolidated Laboratories. These two products blend to provide perfect protection and will postpone floor replacement indefinitely.

Write for complete information and instructions on the modern method of wood floor treatment.

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CON-SOL *Products* AS CLEAN AS SUNSHINE

DIVISION OF CONSOLIDATED CHEMICAL LABORATORIES, INC.

PUBLICATIONS

Annual Report on Education

During 1940 the U. S. Office of Education cooperated with public and private schools, federal agencies, states, industry and private organizations and individuals in fulfilling its obligation to "promote the cause of education," according to the annual report submitted to Congress by John W. Studebaker, commissioner of education. Approximately 32,000,000 persons are regularly enrolled in public schools and colleges and the facilities and personnel of the schools are afforded to hundreds of thousands who are not regularly enrolled, the report revealed.

Presenting—Brazil

"Brazil—Land of Opportunity," is the title of a 30 page pamphlet, recently issued by Junior Programs, Inc., a nonprofit educational organization devoted to producing and touring plays, operas and ballets for school audiences. The pamphlet was prepared by Dr. Hugh B. Wood, professor of education, University of Oregon, and Ellen McClellan Wilshire, critic teacher, University High School, Eugene, Ore., and has been endorsed by the Pan American Union and the Brazilian embassy. This unit, which is the third in a series on cultural appreciations, contains material on the history of Brazil, reading lists, source lists of phonograph records and sheet music, maps, pamphlets, films and other aids.

Cataloging Defense Material

A catalog listing material on education and defense has been issued by the Information Exchange on Education and National Defense, which was organized recently by the U. S. Office of Education. The material consists of publications, posters, outlines, study units, pictorial booklets and magazine articles, all dealing with some defense plan or problem. It has been organized into 24 loan packets, which may be borrowed for a period of two weeks.

San Diego Schools Report

Thirty-five school cafeterias in San Diego, Calif., served 2,000,000 meals at a total sales volume of approximately $198,000, during the year 1939-1940, according to the annual report of San Diego city schools, issued recently by Will C. Crawford, superintendent. The report contains a résumé of the achievements of the school system during the last year and a pictorial review of the activities of the pupils.

North Carolina Survey

"Paths to Maturity," a report of the findings of the North Carolina Youth Survey, 1938 to 1940, has been released by the Raleigh, N. C., office of the W.P.A. The report contains an analysis of the information obtained concerning the social, educational, vocational, recreational and religious backgrounds of 44,963 boys and girls, ranging from 6 to 25 years of age.

Standards for Buses

An illustrated pamphlet containing safety recommendations for the construction, maintenance and operation of school buses has recently been published by the Employers Mutual Liability Insurance Company, Wausau, Wis. The booklet may be obtained from the company without charge.

Study on Flooring

The final report of the committee on schoolhouse floors of the National Association of Public School Business Officials has been released. The report is in two sections, the first containing recommendations covering the best floor materials for each of the several schoolhouse services, and the second consisting of recommendations and specifications for installing or laying various types of flooring.

Protect your floors with HILLYARD Floor Treatments!

Hillyard Floor Treatments will give your floors the vital protection they need, a beautiful lasting surface is produced to prolong the life of the floor and a surface that is extremely easy to keep clean. For over thirty years Hillyard Hi-Quality Products have been giving satisfying service.

Of the various types of floors made today . . . Hillyard's have treatments and maintenance products made especially for each type floor. Hillyard treatments and methods are approved by leading Flooring Manufacturers, Contractors and Architects. There is a Hillyard Maintenance Engineer in your community. Call or wire us, the consultation is FREE.

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Write . . .

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Western Representative: E. P. Finigan,
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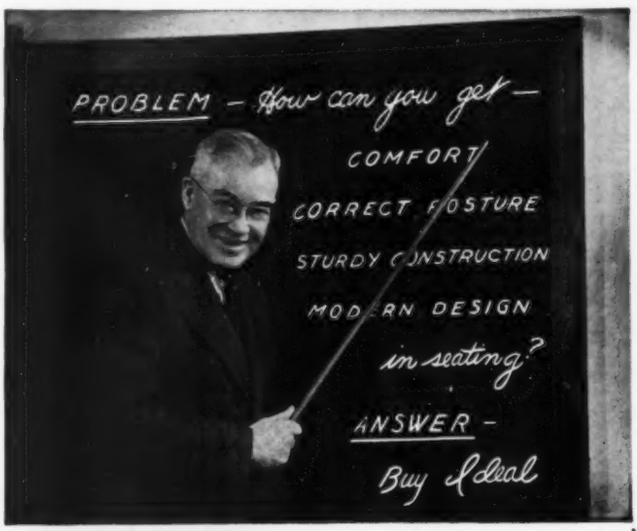

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The Bookshelf

General

WIDTH-WEIGHT TABLES. *By Helen B. Pryor. Stanford University, Calif.: Stanford University Press,* 1940. *Second Revised Edition. Pp.* 15. $0. 75 (*Paper Cover*).

MONTGOMERY COUNTY SURVEY. *Report on Local Governmental Services in Dayton and Montgomery County, Ohio. Chicago: Public Administration Service,* 1940. *Pp.* xix+529.

A HANDBOOK ON THE ANECDOTAL BEHAVIOR JOURNAL. *By L. L. Jarvie and Mark Ellingson. Chicago: University of Chicago Press,* 1940. *Pp.* xii+71. $1.25.

THE REPORT OF A SURVEY OF THE PUBLIC SCHOOLS OF PITTSBURGH, PENNSYLVANIA. *By George D. Strayer and Others. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* xviii+564. $1.50.

CHECK LIST FOR ARCHITECTS' WORKING DRAWINGS FOR SCHOOL BUILDINGS. *By N. L. Engelhardt and Others. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* viii+44. $0.60 (*Paper Cover*).

VOCATIONAL GUIDANCE IN NEW ZEALAND. *By H. C. McQueen. Wellington, C. 1., New Zealand: New Zealand Council for Educational Research,* 1940. *Pp.* 143.

ADAPTATION PROCESSES IN PUBLIC SCHOOL SYSTEMS. *By Philo T. Farnsworth. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* vi+136. $1.85.

STORY OF CIVILIZATION. *By Carl L. Becker and Frederic Duncalf. New York: Silver Burdett Company,* 1940. *Pp.* xv+863+xix. $2.40.

SINGING AMERICA. *Song and Chorus Book. Compiled, arranged and edited by Augustus D. Zanzig. Boston: C. C. Birchard & Company,* 1940. 127 *Songs.* $0.25.

THE BRITISH EMPIRE UNDER FIRE. *By James Frederick Green. Pp.* 96. SPOTLIGHT ON THE BALKANS. *Pp.* 95. *By P. B. Stoyan. New York: Silver Burdett Company,* 1940. $0.25 *Each* (*Paper Covers*).

PUPIL TRANSPORTATION FOR THE SOUTHERN STATES. *Prepared by the Committee on Transportation of Pupils. H. F. Alves and T. George Walker, consultants. Tallahassee, Fla.: State Department of Education,* 1940. *Pp.* 87.

THE PLEDGE. *"I Pledge Allegiance to the Flag." Song. Words by James B. Upham and Francis Bellamy; music by Joseph Wagner. Boston: C. C. Birchard & Company,* 1940. $0.25.

THE EARLY HISTORY OF COLUMBIA COLLEGE. *By Clement Clarke Moore. New York: Columbia University Press,* 1940. *Pp.* xxi+41. $1.

THE SOCIAL ROLE OF THE MAN OF KNOWLEDGE. *By Florian Znaniecki. New York: Columbia University Press,* 1940. *Pp.* 212. $2.50.

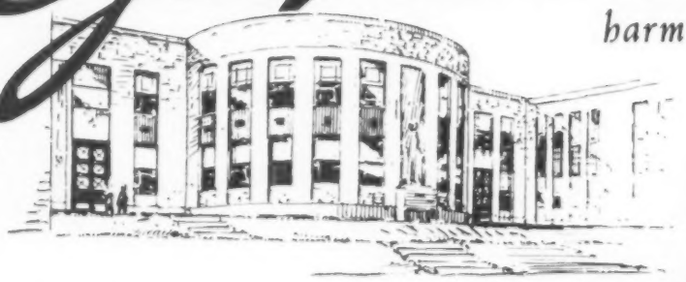
NEW ZEALAND OBSERVER. *A Schoolmaster Looks at America. J. E. Strachan. New York: Columbia University Press,* 1940. *Pp.* 128. $1.50.

SCHOOL LIBRARY SERVICE IN THE UNITED STATES: *An Interpretative Survey. By Henry L. Cecil and Willard A. Heaps. New York: H. W. Wilson Company,* 1940. *Pp.* 334. $2.75.

WHAT WILL INFLATION AND DEVALUATION MEAN TO YOU? *By Donald G. Ferguson, Bion H. Francis, E. C. Harwood, Benjamin D. Mantion and assistants. Cambridge, Mass.: American Institute for Economic Research,* 1940. *Pp.* 144. $1.

Gaylord Library Furniture

harmonizes with the architecture of New School Library



By building library furniture that harmonized with the architectural plan, we helped to complete the striking beauty of this semi-circular library in Rushville, New York.

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Serve America's Youth

School children for over two decades have *used* and *relied* on Dudley Locks. More Dudley Locks are *in use* in America's schools than all others combined. Isn't this convincing testimony that Dudleys are America's *favorite* school lock . . . that they provide thoroughly satisfactory, trouble-free and dependable service for America's Youth.

Master-keyed Combination Padlock

Sturdy, easy to operate, the P-670 is automatic, self-closing. To simplify administrative control, can be master-keyed with other Dudley Locks in any combination desired. Remarkable 4-in-1 locking principle assures maximum security.

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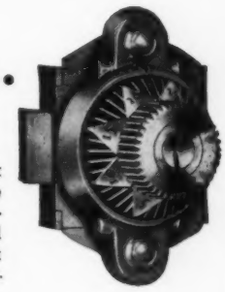
S-642 •



Master-keyed Combination Locker Lock

This square dead-bolt locker lock makes a permanent and dependable replacement. Has quick, easy operation. Combinations can be changed instantly without removing any part of lock from locker door. 4-in-1 master-key defies duplication.

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SCHOOL EXECUTIVES have found that price alone is only half the story. What they get for that price is the other half. True thrift means getting one's full money's worth.

The competition of inferior merchandise has made it difficult for the reputable manufacturer and the conscientious distributor who honestly strive to serve the school field. But their day is returning.

A new appreciation is being felt, a revival of school loyalty to those firms which have consistently offered dependable merchandise, refusing the temptation to cut quality below the recognized standards of utility. They are being rewarded for their steadfast principles.

Most of these substantial concerns have kept right on advertising their products to schools. Having built up a reputation for good merchandise, they could not afford to jeopardize the confidence of school executives in their integrity. Advertising has been their anchor to quality—it will continue to be their means of assuring honest values.

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The hitherto ignored danger arising from a clogged sewer—the possible contamination of the fresh water of an Outdoor Drinking Fountain—engaged the attention of Health Authorities. Hence the AIR LOCK and its amazing effectiveness!

It is an anti-freezing, trouble-proof Outdoor Fountain. All inner working parts come completely and permanently assembled. Practically no maintenance or maintenance costs.

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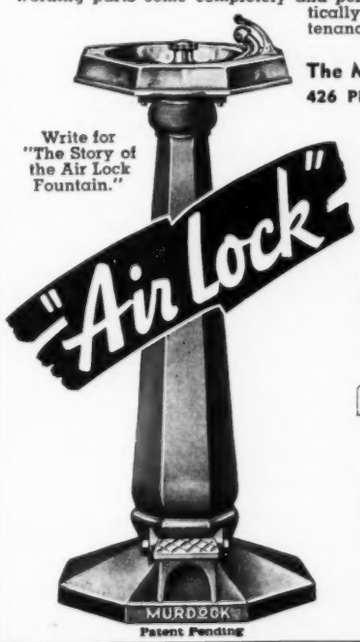

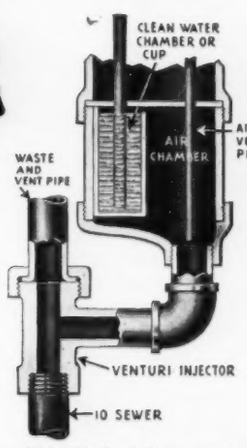

This Air Lock is a successful modern application of an Old, Well-Known Principle of Hydraulics.

Textual

VISUAL AIDS. *Compiled by Lili Heimers. Montclair, N. J.: New Jersey State Teachers College,* 1940. $0.50.

ACTIVE READING. *By Mabel A. Bessey and Isabelle P. Coffin. New York: D. Appleton-Century Company,* 1941. *Pp.* xii+351. $1.08.

HOUSING IN THE UNITED STATES. *Prepared by Archie W. Troelstrup. Boston: Ginn and Company,* 1940. *Pp.* x+79. $0.48 (*Paper Cover*).

MERRY MUSIC. *A Singing School. Teacher's Manual. Edited by Theresa Armitage, Peter W. Dykema and Gladys Pitcher and Others. Pp.* 62. LATIN AMERICAN SONGS. *For Unison and Two Part Singing With Piano Accompaniments. Compiled by David Stevens. Pp.* 42. *Boston: C. C. Birchard & Company,* 1941. $0.50 *Each.*

CORRECT SPELLING: *With Dictionary. By A. S. Taylor, J. C. Gilmartin and W. A. Boylan. New York: Noble & Noble, Publishers,* 1941. *Pp.* xii+109. $0.44.

MODERN TREND GEOMETRY. *By William W. Strader and Lawrence D. Rhoads. Chicago: John C. Winston Company,* 1940. *Pp.* xi+444.

WE SING. *A Singing School. Edited by Theresa Armitage, Peter W. Dykema and Gladys Pitcher. Boston: C. C. Birchard and Company,* 1940. *Pp.* 192.

Trade News

Space Saving Seats

The capacity of the schoolroom can be increased at least 20 per cent by the installation of the new "Defense" line of seating equipment, according to the manufacturer, Peabody Seating Company, North Manchester, Ind. Savings have been made by the elimination of expensive adjustments and swivel.

Stage Lighting Apparatus

Two new folders giving detailed information on how to light stage presentations, auditoriums and theaters have recently been published by Kliegl Brothers, 321 West Fiftieth Street, New York City. Bulletin No. 44 contains information on permanent equipment and bulletin No. 46 features portable equipment and supplies.

Teaching Aids for Shut-Ins

A new teaching device designed to enable ill or disabled children to attend school even though they are bedridden has been announced by Executone Corporation, 415 Lexington Avenue, New York City. The unit is described on page 78 of the March issue of The NATION'S SCHOOLS.

Modernized Power Mower

Jacobsen Manufacturing Company, Racine, Wis., announces a new streamlined power lawn mower that is said to feature beauty as well as efficiency. Beneath the streamlined body are case-hardened steel-cut gears, a 2 cycle motor and an autotype clutch and transmission.

Fluorescent Surface Troffer

Two new types of fluorescent surface troffers designed to produce higher levels of fluorescent light, with pleasant ceiling illumination assured on both close-ceiling and suspension mountings, have been introduced recently by Edwin F. Guth Company, St. Louis. The new surface troffer in sizes for two or three 40 watt fluorescent lamps can be mounted as individual units or in continuous arrangements.

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National Lead Company, 111 Broadway, New York City, is introducing a

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STOKERS
WILL REDUCE YOUR
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Detroit LoStoker is adjustable plunger feed, side-cleaning. Automatically controlled. Hundreds installed in prominent educational institutions.

Coal savings of 15 to 35% reported by schools where Detroit Stokers have replaced other firing methods. Many types and sizes for all boilers. Write today for special school catalog 390. No obligation.

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Insure greater student efficiency and comfort by installing Arlington seating. Its mobility permits arranging in any position for the best light diffusion, conserving eyesight. Its graceful contours give character and refinement to classrooms and study rooms. Seats are built under specifications approved by the best authorities.

Also manufacturers of Auditorium and Assembly Room Seating of all kinds.

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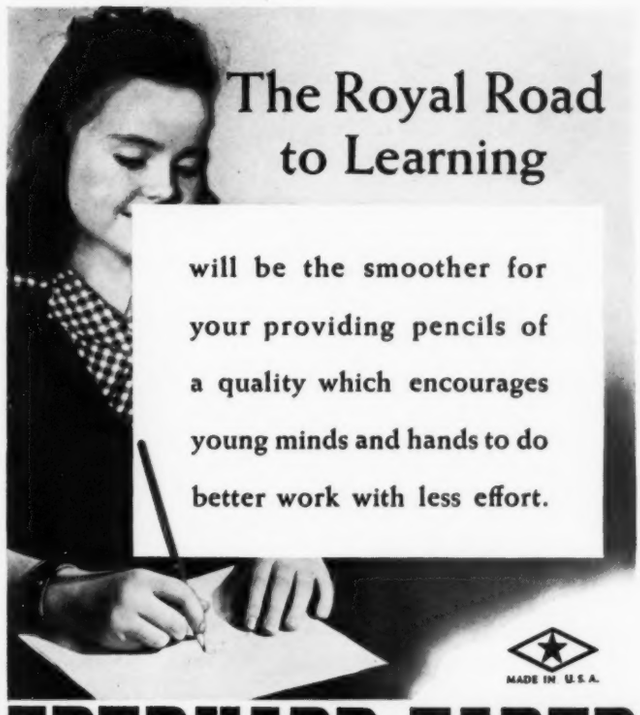

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Drawing Ink

The new Prang drawing ink, recently marketed by American Crayon Company, Sandusky, Ohio, is obtainable in 13 colors, black, white and extra-dense black. It can be used with pens, ruling pens, brush or air brush. The 1 ounce bottle is equipped with a new device called the "stopper-dropper," which makes it possible to fill ruling pens instantaneously and which is so shaped that every drop of ink in the bottle can be used.

High Wattage Lamp

The use of a hard glass bulb has made it possible to reduce the size of a 500 watt lamp to that of an ordinary 200 watt lamp in the new type of high wattage unit that is now being manufactured by Radiant Lamp Corporation, Sherman Avenue, Newark, N. J. In place of the large "mogul screw" base and heavy fixture necessary to support the weight of an ordinary 500 watt lamp, the new unit can be used with a medium screw base like those of ordinary household fixtures.

Combination Recorder and Radio

Unusual versatility and low cost are claimed for the new "Recordio Pro," which has just been announced by Wilcox-Gay Corporation, Charlotte, Mich. The unit incorporates a portable recorder, radio, phonograph and public address system and is suitable for professional or semiprofessional use. The master unit and the turntable unit may be purchased separately. The 10 tube, two band radio of the master unit can be used for reception or public address.

Blueprint Cabinet

Increasing industrial activity inspired the new blueprint cabinet recently marketed by All-Steel-Equip Company, Aurora, Ill. Outstanding features of the cabinet are the ease with which drawers glide in and out and the unit construction that permits of flexibility. The cabinets are available in three and five drawer units, in widths to accommodate all sizes of blueprints, maps and drawings.

Figuring in Fractions

An adding and figuring machine that computes sixtieth fractions has been added to the line of calculating machines manufactured by Underwood Elliott Fisher Company, 1 Park Avenue, New York. The model keeps the 10 key keyboard operation principle for touch figuring and an extra key allows the sixtieth fractional feature to be disconnected so that the machine can be used as an ordinary adding machine with direct subtraction and credit balance features.

Thermostat Redesigned

In order to increase both its eye appeal and its efficiency, the Sterling Thermotrol, manufactured by Sterling, Inc., 3712 North Holton Street, Milwaukee, has been entirely redesigned. A sensitive, built-in volatile type of thermostat opens and closes the radiator valve to hold the temperature at the desired setting. The adjusting knob can be set for any point or desired maximum temperature up to 80° F.

Heavy Duty Vacuum Cleaner

Invincible Vacuum Cleaner Mfg. Co., Dover, Ohio, announces a new member of its family of heavy duty portable suction cleaners. The "Harker Champion" is equipped with a ½ h. p. constant speed motor that is practically silent. It is capable of cleaning bare floors, rugs, walls, lighting fixtures, upholstery, draperies and shelves. The machine is light in weight, compact and easily used by either a man or a woman.

Here Is Your Band Instrument Questionnaire

"QUIZ" ANY BAND INSTRUMENT AGAINST THIS IMPORTANT FEATURE CHART AND YOU WILL FIND—

FEATURES		P-A	Inst. 2	Inst. 3
1	*Accurate model duplication* *Fine tuning—Full tone*	YES	NO	NO
2	*"Tru-Hard" keys on all woodwinds* *Tempered for wear and smooth action*	YES	NO	NO
3	*"Adjustable Pivots" on all reeds* *Precision key adjustment*	YES	NO	NO
4	*"Slik-Valves" on cornets and trumpets* *Retard corrosion—longer life*	YES	NO	NO
5	*"Slik-Slides" on trombones* *Smooth performance—quick response*	YES	NO	NO
6	*"One Piece Braces" on all instruments* *Lighter but stronger construction*	YES	NO	NO
7	*"E-Z Tone" mouthpieces standard equipment* *Designed for easy playing*	YES	NO	NO

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Judged against those features that have made Pan-American the largest selling band instruments in the school field, two other lines (the best of *the others*) make this completely negative showing.

Pan-American band instruments are urgently recommended for school use, not because they are moderately priced, but because they are the very best for the young student, assuring his rapid progress and quick mastery in sound musical education and performing ability. Of course, price *is* a consideration, particularly when many instruments are needed and funds are limited. The Pan-American catalog, which includes nearly all brasses and woodwinds, gives you the ideal combination of "superior quality" and "moderate price."

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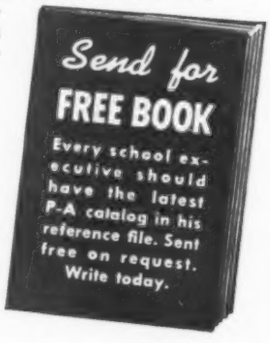
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HOW COMFORTABLE *are your schools?*

One of the greatest changes of recent years in schoolhouses has been in their comfort and homelike atmosphere. Educators have been giving intensive study to color harmonies and other factors in making schools pleasing to the eye and more like home surroundings. These trends will be discussed in The NATION'S SCHOOLS next month . . . the June Portfolio will be given over to the broad subject of General Furnishing. Outstanding examples of the application of modern theories in actual schools will be shown in pictures. Outstanding authors will tell about the use of color, new dress for libraries, kindergartens, cafeterias, homemaking suites, teachers' lounges and other departments. This Portfolio will be full of useable ideas as you go to work on the job of summer cleaning, painting, decorating. Be sure every interested department head sees this June Portfolio.

IN THIS ISSUE: Are your teachers going to summer school? Advanced degrees bring a higher professional rating but what encouragement do you hold out to teachers who spend their summers working in factories and in stores? Actual industrial or business experience is a real eye-opener to those whose training has all been academic. Usually they can do a much finer teaching and guidance job after their sojourn in the market place. Read William Stocking Jr. on the subject, page 68. . . . If some of the practices that go on in our schools today were not familiar and well nigh universal, we could see how barbarous they are, holds Charles L. Worth, who —on page 53—begins a two installment discussion of "Personality Difficulties—Does Your School Cause or Cure Them?" . . . Acknowledged leader in the school cafeteria field, Dr. Mary deGarmo Bryan of Teachers College, Columbia University, is the first to recognize how closely related is cafeteria equipment to quick and efficient food service. No matter how intelligent and well trained the workers, if they are not supplied with the proper equipment, their capacity to produce is limited. Doctor Bryan has called upon Ednà Gilbert, widely known lunchroom director of Youngstown, Ohio, to describe the types and the placement of kitchen, storeroom and cafeteria equipment at Rayen School, Youngstown. The entire department this month is given over to this timely subject—timely because many schools plan to modernize their cafeterias during the summer holidays. See pages 74 to 76.

• • •

NEXT MONTH: The National Defense Program reaches out like a searchlight in every direction and brings into sudden sharp relief the problem of the proper nutrition of our young citizenry. This coming year many more pupils will need to be provided a proper diet in school lunchrooms and for this work better facilities will have to be provided, it being an unfortunate fact that the pupils whose diet most needs reenforcing usually attend school in antiquated buildings. Margaret Batjer, home economics consultant of the professional and service division, W.P.A., will be given the lead position to present the case for the government nutritionists. . . . An appropriate trailer on the Batjer article will be a statement on "How to Get Federal Foods." . . . The NATION'S SCHOOLS is one educational publication that does not shy away from controversial issues. On the contrary, it welcomes a good argument. One of the debatable questions of the year is the proposed return of the once common practice of hiring teachers by examinations rather than on the basis of credentials. The director of a college of education will take issue with the opinion expressed by the president of a teachers' college in the January number. . . . . A board of education that laid all its cards upon the table and exposed itself to cross-examination by parents considers the experiment, although reluctantly entered upon, exceedingly worth while: The president of the board of Glencoe, Ill., where progressivism is spelled with a small "p," will tell of a board members' symposium at which, without the aid of superintendent or teachers, they answered every question put to them by confused, indignant and genuinely interested townspeople.

Some things are more important than money

The health and education of the School Child rank high among the many intangible things upon which we can place no dollar and cent value.

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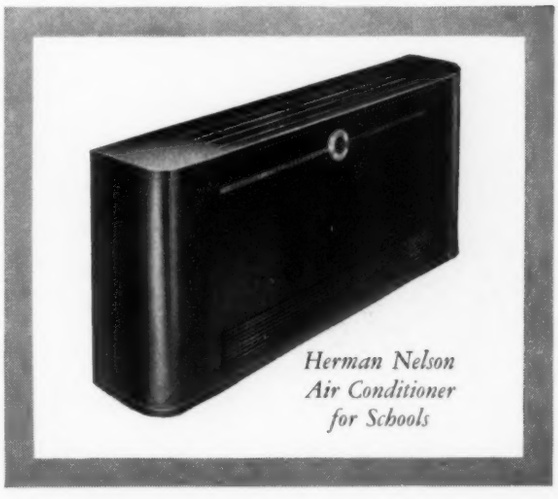

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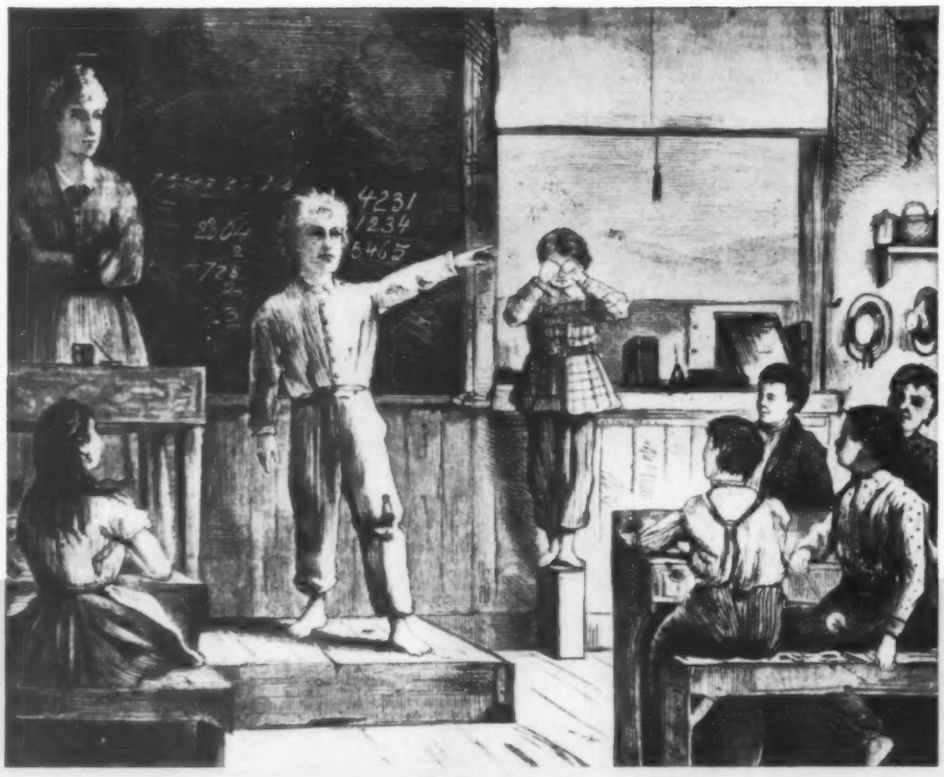

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Side Glances—

WHY does one large industrial concern prefer office girls who have been taking lessons in barefoot interpretive dancing and in mathematics?

Walter N. Polakov of the United Mine Workers of America will give the answer next month in an article on educational needs under advanced technology.

It won't be revealing too much in advance to state that Mr. Polakov, an engineer, favors a school curriculum that trains pupils to react precisely and quickly to various stimuli. He speaks disparagingly of pupils "meandering through the academic abstractions of our secondary schools."

FROM human engineering to heating and ventilating engineering is a broad step professionally but the two subjects will occupy adjacent positions in the July number. A 16 page portfolio will discuss heating and ventilating problems the nation over, with specialists from the South, Southwest, Pacific Coast, North Central States, Great Lakes region and New England summarizing present practice, trends and needs in their localities.

RELATIONSHIPS of the board of education and the employed personnel in connection with the purchase, storage and distribution of books, equipment and supplies will be considered next month by three Missourians: W. W. Carpenter, A. G. Capps and L. G. Townsend of the state university.

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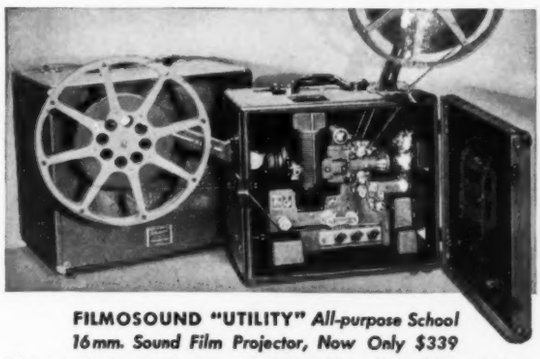

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BETTER PLANT PRACTICES

Safety on Stairs

One of the danger spots in every school building is the stairs, for the tread becomes worn or slippery through constant use. That school officials are conscious of the importance of constant checking to make sure that the stairs are in good condition is revealed in a study of stairs and landings made in various school systems throughout the country.

Custodians, generally, are instructed to make examinations at regular intervals, this survey shows, or, at least, are expected to be always watchful of the condition of stair treads and landings. It is generally recognized that repair work done in time not only reduces the chance of accident but saves expense.

Avoid Slippery Finishes

A first requisite in promoting safety on the stairs, according to R. L. James, secretary of the Independent School District, Mason City, Iowa, is to avoid the use of waxes or cleaners that may produce slipperiness. "Fortunately," he explains, "wooden stairways with their attendant hazards are practically nonexistent in our schools today."

Mr. James has found that the best type of stair tread construction is smooth cement or terrazzo over reenforced concrete into which an abrasive, grooved iron nosing about 3 inches wide is laid on the treads. He, likewise, reports satisfaction with nonslip tile but adds: "We have not used this type long enough to pass judgment on its durability." Terrazzo or smooth cement without the abrasive nosing he regards as slippery and dangerous.

"On stair landings and at the base of stairways," Mr. James states, "we recommend the use of nonslip tile, especially on new construction. On landings that are finished in smooth terrazzo or tile we use rubber matting, ½ inch thick and about 24 inches wide, covering an area the length of the stair treads, particularly where pupils make right angle turns immediately upon reaching the bottom of a flight."

Likes Terrazzo

F. L. Reynolds, clerk and purchasing agent of the board of education, Salina, Kan., shares Mr. James' preference for terrazzo.

"We have several types of stairs in our various school buildings," Mr. Reynolds reports, "but I believe the safest, quietest and most easily cleaned is the terrazzo stair that is finished with an approved type of safety metal edge and has rounded corners at the junction of the tread and riser and the tread and side wall.

"In constructing a new building, my preference would be for the same type of treatment for the stair landing that is used for treads and risers. This would

No. 292

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contribute to uniformity in looks and would promote safety."

Other Opinions

At Quincy, Ill., Charles E. Lane, secretary of the board of education, tells us that he would select either a terrazzo or a hard maple tread. He doesn't use nosing on treads and treats stair landings the same as he treats treads.

Murray P. Wylie, director of maintenance, Los Angeles, has met with the greatest success by using cement treads with No. 20 carborundum grit lightly troweled in at the time the treads are formed, the grit never being embedded below the surface of the tread. He also treats stair landings in the same manner.

At Hammond, Ind., Donald E. Gavit, business manager of the board of school trustees, reports maple stair treads in most of the buildings; no special effort is made to protect them. "We replace treads as they become worn," he states; "this is part of the regular maintenance program and under the jurisdiction of the superintendent of buildings and grounds. We have other types of treads in buildings of recent construction but they have not been in use long enough for us to work out a plan of protection for them."

C. J. Carmody, secretary of the department of public instruction, Mount Vernon, N. Y., finds effective alundum aggregate, either in full-width precast treads or in 6 by 6 inch tiles installed on landings and stair treads.

At West Chester, Pa., C. T. Miller, secretary of the West Chester School District, is covering all old-style wood treads with metal; the treads measure 9 or 10 inches in width.

Cleaning the Walls

Is it more economical to paint school walls than to wash them?

This is one of the questions that will be answered in the symposium on the effect of clean walls on general illumination that is scheduled for publication in these pages next month. When we asked one building engineer to give us his experience he said, "In many cases, provided the paint was not peeling or damaged, we have washed walls with the result that they look as if they had been newly painted. However, we have found that it is often more economical and quicker to paint the walls than to wash them. Our painting schedule calls for the painting of interior walls every eight years. In the meantime a lot of dirt has accumulated, especially over radiators or wherever there is a large circulation of air against the wall. In these cases washing has proved to be quite successful."

"The Custodian at Work"

Every maintenance man will want to have on his desk for ready reference a copy of N. E. Viles' book, "The Custodian at Work," which is just off the press.

"The complicated task of school plant maintenance makes it essential that the janitor plan his work in an intelligent manner," states Mr. Viles, who is well known as the director of school building service, Missouri State Department of Education, Jefferson City. "He should be interested in learning more about his job." Therefore, Mr. Viles has assembled and presented his material on an instructional basis rather than as a set of rules and regulations—or on a "do" or "don't" basis.

The volume starts with a discussion of school building and the modern educational program. This is followed by the qualifications, responsibilities and obligations of the school janitor and also the part he plays in public relations. The author then proceeds to outline an organization for janitorial service. Some idea of the subjects covered is revealed by such chapter headings as housekeeping, daily floor cleaning, safety in schools, school floor maintenance, heating and ventilating systems, fuels and combustion and miscellaneous duties of the custodian.

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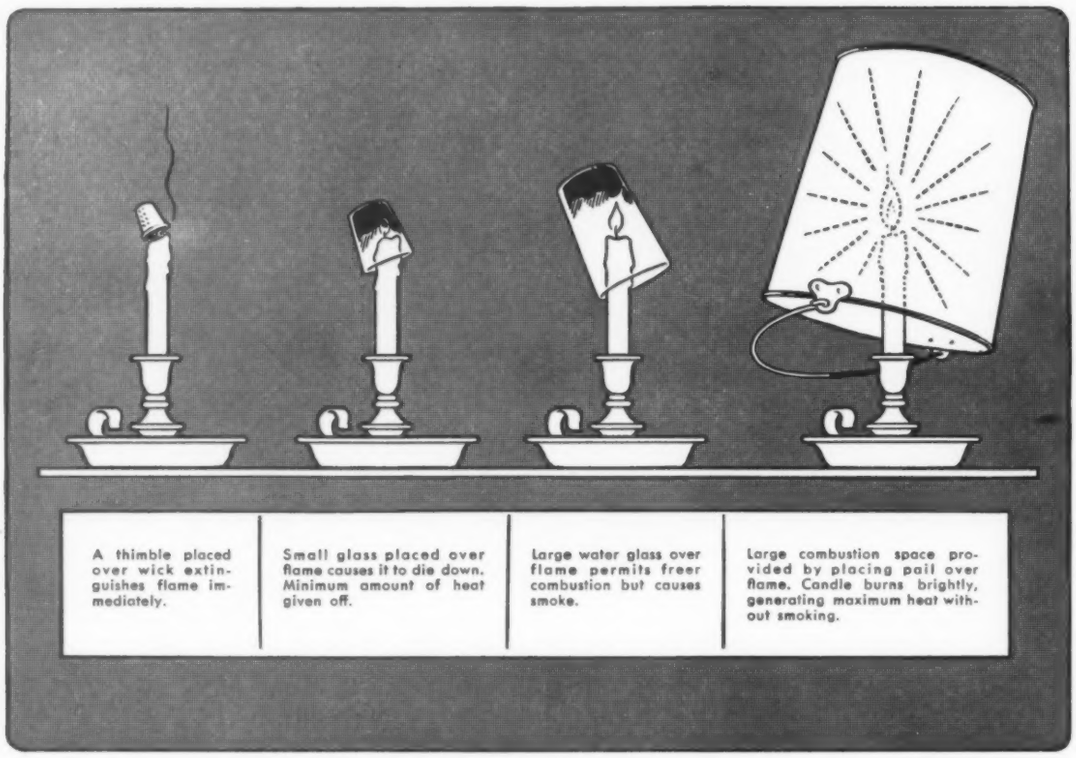
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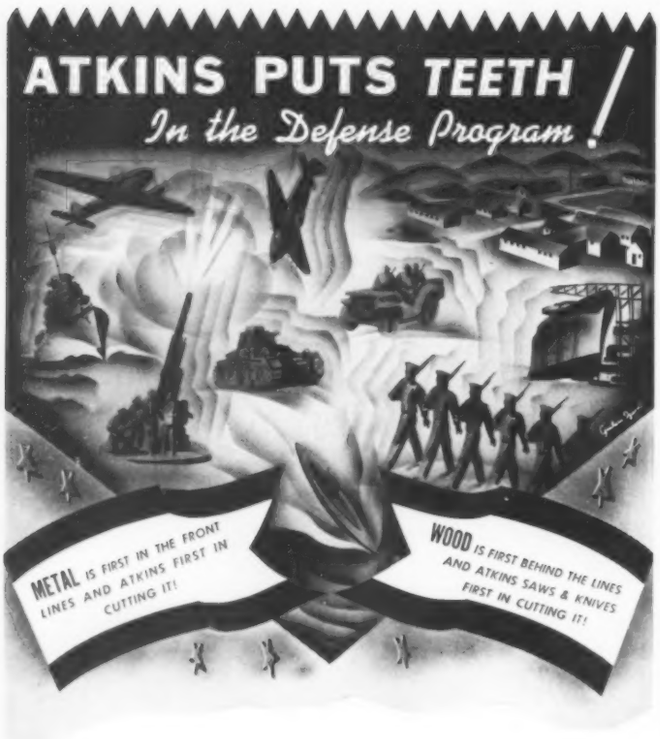
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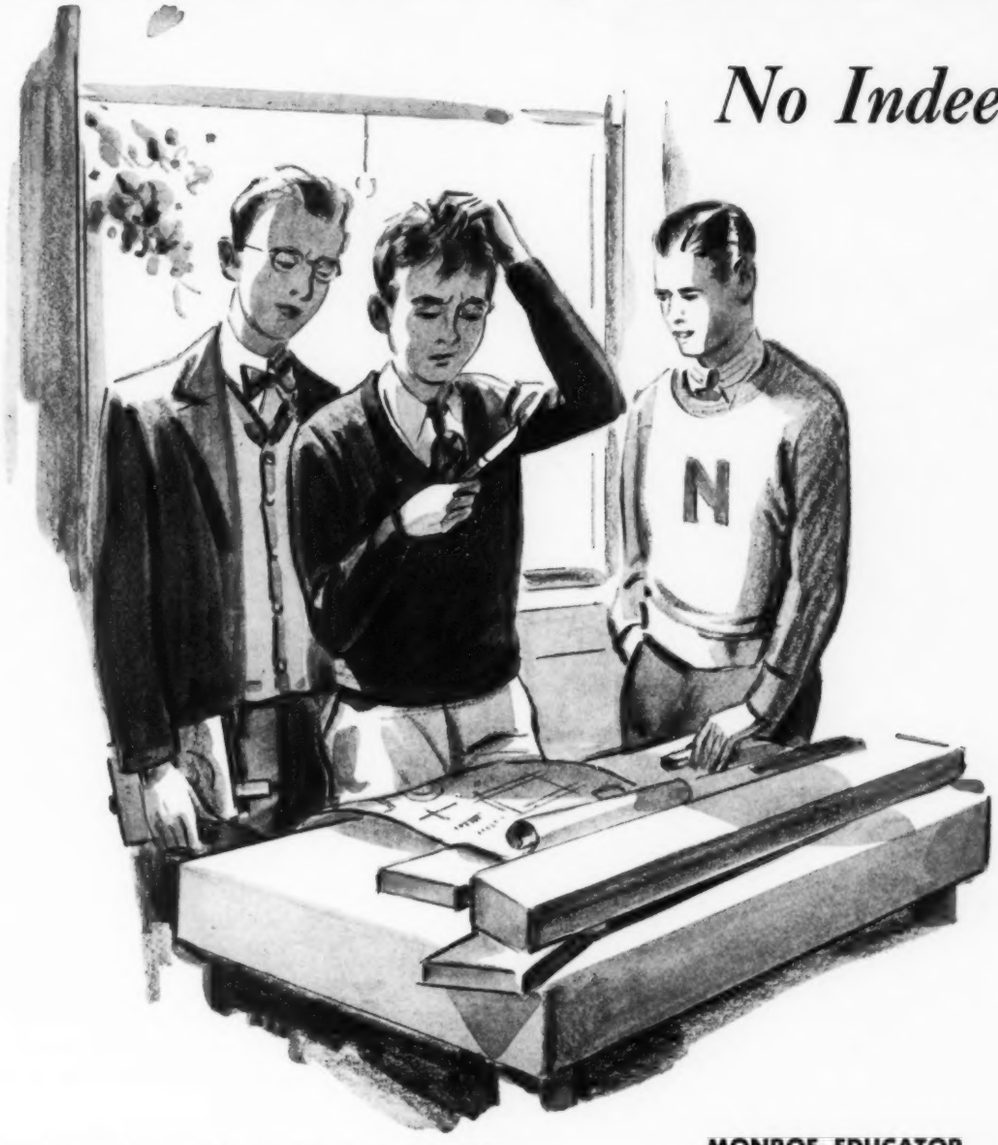

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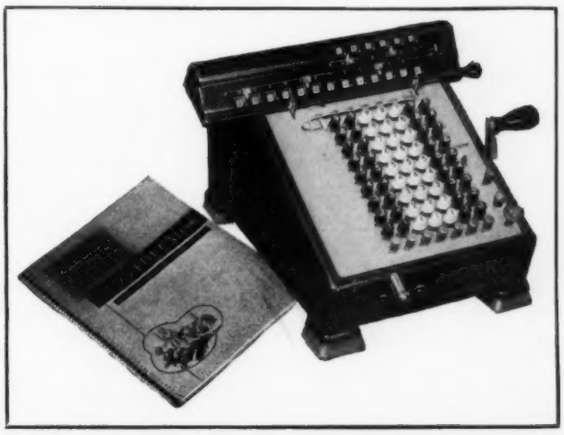

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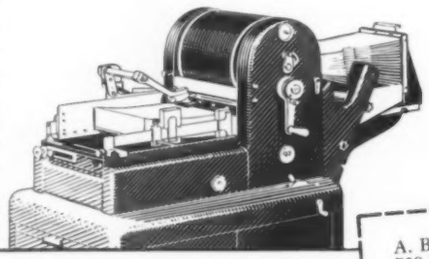

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LOOKING FORWARD

S. 1313

ON APRIL 7 Senator Thomas of Utah introduced a bill for himself and Senator Harrison of Mississippi calling for an appropriation of $300,000,000 for public education. Like most of the other bills introduced during the current session of Congress, it is designed to "strengthen national defense," as well as to assist the "states and territories in meeting financial emergencies in education and in reducing inequalities of educational opportunities." S. 1313 is the old Harrison-Thomas, or National Education Association, federal aid bill in a new dress.

Certain attempts have been made to eliminate the objections that were raised to the previous bill but a number of other weaknesses have appeared. The new bill provides for a special board of apportionment within the Federal Security Agency that will determine relative need and will develop a formula for the apportionment of funds. This federal-lay board apparently has no relationship to the Office of Education and thus removes some of the authority from the Office of Education and centers it in the agency itself. Although the appropriation provides for allocations up to 25 per cent for buildings, there is no assurance that any appropriation will be made for this purpose since the apportioning board has wide discretionary powers.

It has been our contention that federal aid to public education carries control with it regardless of sweet statements to the contrary. Inasmuch as federal aid is necessary to equalize opportunities between states, federal subventions preferably should be given for those activities in which control terminates in time and in which there is no possibility of interference with the instructional program. Specific aid for school buildings, the need to be determined by the Office of Education from a review of state plans, and technical construction under the direction of the Public Works Agency constitute one of these areas. A second is aid to individual students (work-grants) through the National Youth Administration. A third possibility might be a general appropriation for public education with a simple method of distribution to be determined by Congress, instead of being subject to bureaucratic or political manipulation, and with post-auditing responsibility resting with the general accounting office.

Since the revised Thomas-Harrison Bill (S. 1313) does not do these things and since its looseness in terminology makes it confusing, we do not believe that it is a bill that merits favorable attention from the teaching profession or from the people.

Buying Specifications

THE purpose of carefully prepared purchasing specifications is to obtain the desired standard at the lowest price that is commensurate with the specified quality through competitive bidding. The by-products of clearly defined specifications are the reduction in vendor conflicts and the consequent improvement of buyer-contractor relations.

There are at least five methods of writing specifications for the purchase of supplies and equipment. A most desirable specification is one that states exactly the use-values and quality of the material desired; under this practice quality would be described in terms of expected performance, which might be determined under conditions that simulate actual performance.

Within certain limits, such testing is already being done in the laboratories of the National Bureau of Standards and also in many independent research laboratories. Performance tests are carried on extensively by leading manufacturers of quality equipment within their own plants.

This type of performance specification must necessarily be deferred until such time as sufficient research has been completed to make purchasing of school equipment on this level possible.

Good current practice inclines to the "base bid with alternate" type of specification. Under this plan an article of a determined standard is named as the desired type. Bidders are permitted to offer proposals for other than the named product, provided that full and complete statements regarding deductions or additions are included in the bid.

The assumption underlying this form of specification is that the agency that is responsible for buying the supplies or equipment has determined through tests or other methods the standard of quality desired in terms of a manufacturer's product and has expressed it as the specification base. If other products are offered, they must be submitted in terms of all the factors

described or implied in the base bid. Competition within quality ranges is made possible and many other purchasing difficulties are avoided.

Another type of specification method is the "descriptive" plan, which specifies the material desired in detail without reference to specific products. If this specification is combined with the performance specification and tests described earlier it is a sound method. If it is presented purely as a description it is less desirable.

The "open" or "equal" specification is much wider than any of the three preceding types and under current conditions is of doubtful merit. The poorest method of specifying supplies and equipment is through use of the "cold" or "flat" specification, which names only a single product. This method provides for no competition and, hence, does not offer the buyer sufficient protection against price inflation.

Free Feeding

THE policy of providing free lunches to public school children, inaugurated as an emergency measure by the federal government, is rapidly assuming proportions that bid fair to make it one of the most revolutionary activities within recent years. For the last five years the number served has increased annually until more than one million children were fed during 1939-40. The program was expanded considerably during 1940-41 until at the close of the current academic year the total number of children involved has been estimated at 6,000,000!

This feeding program has met with such popular acclaim by teachers, parents and others who are familiar with the serious malnutrition of our children that its rapid expansion may be confidently anticipated. Fragmentary data from Army examinations of draftees indicate that at least 40 per cent of the rejections may be credited to weaknesses growing out of malnutrition in childhood. This is shocking information and raises the question whether children suffering from serious nutritional defects are capable of realizing effective benefits from the total school program.

Malnutrition is a problem of long standing. Like discussion of venereal disease, it has not been considered good social form to talk of child malnutrition in a land so bountifully endowed with natural resources as the United States. Frank and objective consideration of this problem is long overdue. Even prior to the depression, teachers in urban districts realized the folly of providing good instructional opportunity to half-starved children. The best teaching cannot overcome the effects of lack of body-building food that is so essential to the growing child.

Teachers did the best they could. They furnished free lunches from their own slender resources. They provided clothes and, in many instances, even instructional equipment. The burden became so great that parent-teacher organizations and other urban community agencies were asked to share it. Parents of children economically more favored contributed indirectly because school lunchroom surpluses were diverted to provide free food for the needy with the onset of depression.

The federal emergency agencies under the E.R.A., C.W.A. and, later, W.P.A. interested themselves in this problem and the work was rapidly extended. Child feeding formed a defensible use of surplus commodities. At the present rate of development, the program of free feeding may be extended within a few years to the entire public school population.

Providing the children with well-balanced, nutritious meals is a sound governmental investment; it is another aspect of the equalization of individual opportunity and is logically a responsibility that the federal government may share with communities and states. It is one step in attempting to conserve our valuable human resources that have been thrown so far out of balance through long-continued economic maladjustments.

The diversion of surplus commodities for the improvement of child health in rural and urban centers also fits in well with the government's policy of maintaining balance between industrial and agricultural production. With the possible exception of a brief period following the present war, the United States will be confronted with the problem of agricultural surpluses. Feeding the children furnishes a continuing and worth-while outlet.

The physical effect of this program on the schools will be that the kitchen and lunchroom will become essential units of every new building, in addition to being factors in the remodeling of old buildings. This means increased investment in building space, plumbing and special service equipment.

What ultimate effect the free feeding program may have on wholesale and retail outlets is not yet entirely clear. Much current trade will probably be diverted. Since the extension of this activity will represent business that has not previously been enjoyed, it will probably restrict the growth of business somewhat.

Henry E. Bennett

THE unexpected death of Dr. Henry Eastman Bennett at the age of 68 removes from education one of the sturdy pioneers in school equipment experimentation. His research in posture seating will remain a lasting monument to a varied professional career.

Doctor Bennett was a native of Buffalo, N. Y., but spent the early part of his adult life in Florida where he received his training and his first experience as a public school teacher. Later he attended the University of Chicago. After teaching in the Fernandina public schools and the Florida State Normal School,

of which he was also president, and also serving in the state department, he became professor of philosophy at William and Mary College at Williamsburg in 1905. Two years later he was made head of the school of education at William and Mary College where he served until 1923 with a brief interval of overseas social service during the World War. He completed his master's degree at the University of Chicago in 1922.

His intense interest in the subject of improved school seating led Doctor Bennett in 1923 to become associated with the American Seating Company as research adviser, a position he held until his death. He continued his graduate work and completed the doctorate of philosophy in 1925. Three years later he produced his most important book, "School Posture and Seating," which quickly became a standard work.

Doctor Bennett was a man of intense convictions and extreme seriousness. His work in school equipment research was characterized by an unusual intensity of application and singleness of purpose. As an idealist, it hurt him at times to be practical. He was always seeking the ultimate, the perfect solution and seemed not to be content or happy with less. The improved health of school children, which, in his opinion, can be achieved largely through improved seating, was not only a life-time passion but his hobby as well.

The Negro

DR. EDWIN R. EMBREE, president of the Rosenwald Fund and widely known educator, is noted for his keen insight into social problems and his courage in presenting his opinions. We reproduce here two paragraphs of his last annual report (1938-40) that deserve thoughtful consideration by the entire teaching profession:

"Among the weaknesses of our democracy is our treatment of Negroes. Our attitude toward this race, which makes up one tenth of our entire population, more than one quarter of the historic region of the South, is a threat to the whole theory and practice of democracy. So long as we degrade one segment of the people we set a pattern of caste and discrimination that may easily be transferred to other groups. No race or class can be firmly assured of fair play so long as we continue to treat any group unfairly. Consideration for the Negro rests not merely on the grounds of humanity and charity; it rests on the solid base of enlightened selfishness. It is a question not only of the rights of the Negroes themselves: it is a question of the total health and strength of the nation.

"We cannot have an enlightened democracy with one great group living in ignorance. We cannot have a healthy nation with one tenth of the people ill-nourished, sick, harboring germs of disease which recognize no color line, obey no Jim Crow laws. We cannot have a nation orderly and sound with one group so ground down and thwarted that it is almost forced into unsocial attitudes and crime. We cannot come to our full vigor in the arts unless we give scope to the talents of that race which has proved itself most creative in all forms of art and expression. We cannot come to full prosperity with one great group so ill-trained that it cannot work skillfully, so poor that it cannot buy goods."

The treatment accorded the Negro is not one of the bright spots in our democracy. Like most deep sociological and economic problems, it cannot be solved by assuming that the Negro is immature in his civil status or by statutory enactment. These undesirable discriminations and curtailments of opportunity will be corrected only as our sense of justice and fairness creates in men's hearts the willingness to subordinate senseless personal prejudice and conventional attitudes in favor of fair play. The solution of the Negro problem is one of our serious internal defense needs.

Needed Contribution

THE growth of the scientific movement in education, the increasing emphasis on research and the rapid extension of research activity have combined to create a situation in which both educationist and educator find themselves overwhelmed and frequently confused. There has long been a need for presenting conveniently in condensed form the status of research in the several fields of endeavor.

This much-needed book has been recently produced (Macmillan) by a committee of research specialists under the chairmanship of Dr. Walter S. Monroe and under the auspices of the American Educational Research Association. As a first publication the book is both satisfying and disappointing. It supplements to a valuable degree the reviews of current research literature now published at regular intervals by the association. It summarizes, with a minimum of words, an extensive field as regards status. Careful reading of many of the summaries indicates that the special article authors have not always been as catholic-minded and objective as one might expect of researchers. Significant names and publications have been given little or no mention. In some instances too much emphasis has been placed upon periodical publication and doctoral dissertations to the practical exclusion of more extensive treatment of researches in book form. With the first volume as an example, it is our opinion that a second publication a few years hence may be more comprehensive in its analysis of the field. Despite its shortcomings, this first volume should be well received.

The Editor

School Lunch Program—

MARGARET BATJER

AN INCREASING demand for the provision of nutritious lunches in our public schools has resulted in continued expansion of the W.P.A. school lunch program during the last five years. It also has given impetus to the plans of progressive school districts to operate a school lunch program as a part of their regular educational service.

These two factors, in turn, have influenced the trend in modern school architecture toward building plans that include adequate kitchen and lunchroom or cafeteria facilities to permit the preparation and serving of noonday meals.

The consolidation of the old-fashioned one room schools in rural areas during the last six years has increased the demand for lunches and for lunchroom facilities in districts where pupils must travel long distances to the more centrally located consolidated schools.

During the early years of the depression—as far back as 1929—teachers of public schools in hard-hit cities and towns saw that the actual hunger of pupils in their classrooms was retarding their progress and tried to do something about the situation themselves.

They quickly discovered, however, that the problem was one of widespread undernourishment or malnutrition from faulty diets. It was far too big for them to cope with singlehanded. They first sought the aid of local parent-teacher associations and interested citizens. Many of these groups gave wholehearted cooperation in supplying food and in volunteering their services to provide nourishing, well-balanced food daily to the children most in need of it. Still only the surface of the problem was scratched.

In 1933, under the Emergency Relief Administration program that provided relief jobs for needy men and women in many communities, thousands of women were put to work preparing and serving free lunches to undernourished children in the schools. These children were

Above: It's lunch time at Phillip Shore Public School, Tampa, Fla., where the parent-teacher association sponsors a W.P.A. lunch project. Right: Preparing spinach at one of the W.P.A. canneries. Opposite Page: First and second grade pupils of Oak Hill School, Chattanooga, line up for lunch.

New Architectural Influence

**Home Economics Consultant, W.P.A.
Washington, D. C.**

selected largely from families on relief. The W.P.A. with its more adequate facilities for organizing and directing a program of public service provided the opportunity for a vast expansion of the school lunch service. Since 1935, the number served under the W.P.A. school lunch program has increased to a point where more than 4,000,000 children were served hot lunches daily during the current semester.

"I know of no way to ensure more effectively the strengthening of our internal defenses for the years to come than by caring for the physical welfare of our children today," Mrs. Florence Kerr, assistant commissioner in charge of professional and service projects, said in discussing the broadening of her school lunch program and other health services to children.

"Sturdy, healthy children are essential to the nation's survival. We will not allow our concentration upon immediate defense measures, however important, to blind us to the need for continuing to build for the future. That process involves the conservation of our physical and natural resources, yes; but above all else, the conservation of our human resources."

From the outset, the successful operation of the school lunch program required considerable ingenuity on the part of both local sponsors and the W.P.A. workers employed. In schools that had no lunchroom facilities, much less the necessary kitchen equipment, sponsoring groups, teachers and project workers had to devise ways and means of providing makeshift arrangements that would permit them to prepare the meals under sanitary conditions and to serve them promptly and properly. Care was taken to develop good manners and food habits.

In small towns or rural areas that have W.P.A. school lunch projects, the food is often prepared in nearby kitchens—in the parish halls of churches or other places provided by the sponsors—and is then carried in automobile or truck to the schools. There, an assembly hall or classroom is converted at noontime into a lunchroom.

In many crowded city districts where the older schools are without any facilities or equipment for preparing meals, a central kitchen has been set up. Here the food is prepared in quantities sufficient to serve a number of schools. It is carefully packed to keep it warm and fresh and is delivered in trucks. When one considers that a typical menu includes a vegetable soup or meat

Garden project. Produce raised here is used for school lunches and also for surplus commodities.

and vegetable stew, a substantial sandwich, milk and a cooked dessert or piece of fresh fruit, it can readily be realized that the preparation of these lunches is no small task.

All of this points to the need for more modernization of the nation's school plants, for schools equipped with the proper facilities to permit the preparation and serving of noonday meals in each school individually. Such facilities are included in most of the modern schools; in practically every county of the 48 states some schools are so constructed. A large number of the 33,000 schools built or improved by the W.P.A. since 1935 have either lunchroom or cafeteria facilities.

In these more modern schools that have proper equipment, the problem of serving school lunches is simple, but, too often, the pupils who are most in need of the nourishing lunches are enrolled in antiquated schoolhouses in which there are no facilities.

In addition to supplying equipment and facilities when these are lacking, the local sponsors of all W.P.A. school lunch projects are responsible for supplying the food that is served. They often obtain a large part of their foodstuffs from the Surplus Marketing Administration or from a W.P.A. gardening and canning project. In the latter case, the sponsors may supply the seeds and the canning equipment. Funds allocated to the project are used to pay the labor and supervisory staffs. Sometimes, a W.P.A. gardening and canning project is operated in connection with the school lunch project and this helps to solve the sponsors' food problem.

These gardening and canning projects operate largely in the rural areas. They may have the same sponsorship as the school lunch project, which is usually the state or county department of education. Sometimes, gardening and canning projects are sponsored by the state or county departments of public welfare. A tract of land is leased, often in the vicinity of the schools to be served. The technical supervision of the gardens and the greater part of the labor are furnished by the W.P.A. Often, the project workers are assisted by boys and girls from the National Youth Administration. The canning projects are supervised carefully by experts in this line of work. Vegetables produced in the gardens during the spring and summer months are canned for use in the schools each term.

The value of the school lunch program is demonstrated in the reports of educators who have kept records of the pupils served in their schools during the last five years. These reports universally show substantial gains in weight. They also show that the school lunch is a contributing factor in improved class and attendance records.

Since the W.P.A. school lunch program is concentrated in the areas in which the need is greatest and in which truancy and delinquency were often prevalent, these results are significant. More than half the total number of pupils served by the school lunch program attended school in the Southern States. About 34 per cent of those served were in rural or small town areas and about 35 per cent, in metropolitan areas.

Many educators who have reported on the program have expressed the opinion that the need for a well-balanced meal is not confined to the children of the underprivileged but that meals should be accorded to all school children. They point out that thousands of pupils live too far from school to get home at noon and, as a result, buy unwholesome "snacks" for lunch. Many parents with adequate income are either heavily burdened with other responsibilities or are ignorant of the dietary requirements of a growing child and, hence, do not provide the necessary balanced noonday meal.

The trend in modern school design indicates that this opinion is shared by a growing number of local officials whose task it is to watch over the development of young America.

How to Get Better Lunches

Surplus Foods Are Donated

AUTHORITATIVE surveys reveal that at least nine million American school children are underfed and underprivileged. Upon these young people much of the nation's future welfare will ultimately depend. What is being done to help them achieve normal health?

One answer is to be found in the community school lunch programs developed by the Surplus Marketing Administration, an agency of the United States Department of Agriculture. Agricultural surpluses bought by the S.M.A. to help stabilize marketing conditions are made available to these lunch programs through state welfare agencies.

Community Backing Necessary

The development of school lunch programs is dependent upon community interest and energy. The Surplus Marketing Administration is in a position to donate large quantities of surplus foods for school lunches but, because its purchases are confined to surpluses only, it is unable to undertake to provide the entire meal. Therefore, it is the community's responsibility to provide extra food to supplement surplus commodities, as well as facilities, space and labor.

In order to receive surplus commodities, a school lunch program must be certified as eligible for them by the state welfare department and must be sponsored by public or private groups that are willing to supply the other requirements.

Obtaining sufficient competent labor for school lunch programs is a major item. However, it frequently happens that the W.P.A. or N.Y.A. will assign cooks and helpers to these programs. When such help is not available, individuals in the community volunteer their services, usually rotating work periods.

Approximately a third of the programs are operated through school cafeterias. In comparison with projects which, starting with nothing, are built up into a community service, the feeding of underprivileged children in the school cafeteria is a relatively simple enterprise. Usually, the facilities, the supplemental food, the space and even sufficient labor are already available. All that is necessary is the addition of surplus commodities.

However, if the cafeteria is running on a deficit and is experiencing hardship in trying to serve even those children who can pay, some of the methods used in organizing other school lunch programs can be made to conform to the needs of a cafeteria program.

The distribution of S.M.A. commodities must not interfere in any way with the workings of regular commerce. That is why the label "Not to be Sold" is placed prominently on all these foods. That is why, too, school cafeterias that are carrying on free lunch activities with S.M.A. help must operate on a nonprofit basis.

One point of great concern in handling all school lunch programs is to make sure that there will be no differentiation between paying and nonpaying pupils. A ticket or token system is usually the answer to this problem. Those who can pay for their tickets do so; those who cannot pay receive free tickets. No one needs to know who has paid or who has not.

Food selection by the children naturally does not enter into the picture in schools where only one meal is served and there is no choice. However, in school cafeterias, the possession of lunch tickets leaves the choice of food up to the children themselves. Education in proper nutrition and food values can do much to woo them away from the notion that a hot dog and a candy bar constitute the ideal lunch. Some cafeterias are now beginning to develop the plate lunch idea, that is, confining the menu to two or three well-balanced plate lunches from which the children may choose the one they prefer. This ensures their getting a nutritious meal and also puts a check on their daily expenditures so that their tickets will stretch over a full week and will not be entirely spent the first few days.

Even though the S.M.A. is unable to provide the whole meal, its contribution to child feeding programs is a substantial one. The loss of foreign markets, plus record crops, has resulted in large purchases by the S.M.A. of a variety of foods of excellent quality—butter, dry skim milk, evaporated milk, citrus fruits, pecans, fresh and dried vegetables and fresh and dried fruits. Many of the state welfare agencies are at present carrying heavy inventories of a number of these commodities.

When an application to the state welfare agency has brought forth a certification of eligibility for surplus foods, the school lunch program may then requisition its needs; it must, of course, adhere to the distribution rates established by the S.M.A.

Program Continued in Summer

Recognizing that the end of the school year does not mean an end of the children's need for nourishing food, the S.M.A. plans to continue to make surplus commodities available to summer lunch programs as it has in past years. One indication that such programs fill a definite need is the year round lunch project in Holyoke, Mass. There, 62½ per cent of the children who have been receiving free lunches at school all winter return to school each day for lunch throughout the summer months.

As a result of the many efforts to feed the underprivileged children of our land, their health has shown definite improvement. Mental attitudes have changed, too. The children, generally, are more energetic and alert; their appearance is better, and their resistance to disease and infection is stronger. School work also has improved; attendance is more regular.

The federal government, in the person of the S.M.A., is ready to help the communities to help themselves—to build their future and the future of the nation by building and maintaining the health and strength of tomorrow's citizens.

National Teachers' Examinations—

HARL R. DOUGLASS

THROUGHOUT the country a new development in the selection of teachers is stimulating increasing interest. Peculiarly enough, this development actually turns the clock back and revives a practice that, once quite common, is now rare except in large cities, *i.e.* the selection of teachers, at least in part, on the basis of examinations for that purpose instead of wholly on the basis of credentials.

Handicapped by Its "Past"

The project that has aroused so much interest is the national teacher examinations of the American Council on Education. This undertaking, whatever may be its merits, starts off with a serious handicap in that most alert schoolmen remember the short-sighted attempt only a few years ago of the Cooperative Test Service, which was under somewhat the same central leadership and was also sponsored by the American Council on Education, to saddle American secondary schools with statewide "co-operative" testing programs.

The fact that this venture, so obviously intended to vest the control of the curriculum in testmakers and to arrest experimentation and improvement of the curriculum, fortunately failed in its objectives will not entirely offset the initial suspicion with which many school people will approach the examinations.

Unlike the ill-fated statewide testing venture, the N. T. E. enterprise is sponsored by a committee for the American Council that includes a number of practical schoolmen of demonstrated ability and excellent reputation in American education.

On the committee, however, one fails to find a single name among the many who have made substantial contributions to the theory and science of measurement and test construction and interpretation. This could hardly have happened by chance. This feature of the project is reminiscent of some of the history of the cooperative statewide testing projects and both savor strongly of academic and professional politics.

Despite these undeserved and unnecessary handicaps the idea has much to recommend it and should be evaluated primarily on other bases. The remainder of this discussion will be devoted to an attempt to do that fairly and accurately.

Fifty years ago teachers were certificated rather generally on the basis of written examinations and, as late as five years ago, the practice of county and state examinations was an important avenue in a majority of the states. The faults of this system of licensing teachers were numerous and serious. The marking of papers by county and even state officials was so subjective and otherwise questionable as to render the scores, especially for comparative purposes, practically worthless. In a day when few prospective elementary school teachers had more than a high school education the practice had merits but even then only as a temporary expediency.

With the increase of enrollments in colleges and in the standards for teachers in terms of years of school attended, and with an increased recognition of the degree to which examinations for certification failed to ensure well-prepared teachers, state after state moved in the direction of state certification on the basis of statements of graduation or amount of course work from institutions of higher education until today that method has become the standard route to teaching appointments.

Limitations of New Method

The limitations of this newer method, however, which soon became apparent, resulted in certain undesirable developments and threatened to become more serious as time went on. As attendance at institutions of higher education came to constitute the royal road to certification and jobs, some institutions in the competition for enrollments insisted less and less upon quality of scholarship. Lacking reputation as scholarly institutions, they offered prospective students assurance of credits and, hence, certificates. In some of these, two years of work would be completed in little more than a year and four years of work, in three years.

In recent decades most normal schools have been transformed into teachers' colleges. The faculties of the large majority of normal schools, particularly in academic departments, were none too well trained to serve at normal schools and were, at least at first, grossly inadequate as college staffs. Even as the passage of time furnished the opportunities for improvements, the additions to the staffs were frequently not such as would raise the average.

"Graduate" Degrees Offered

As shown by the median scores on the American Council intelligence tests given to entering freshmen, some colleges and many teachers' colleges year after year had student bodies of markedly inferior abilities. Yet these students passed their subjects, were awarded certificates and went into competition for positions with graduates of institutions that were characterized by well-trained staffs and students of superior intelligence. Furthermore, in recent years, some of the institutions that have not yet arrived at the status of an average college have begun to offer "graduate" degrees.

Today the possession of a bachelor's degree does not in itself guarantee more than three or four years' attendance in a "college" of some kind. The possession of an M.A. degree guarantees no more than a few additional summer school terms. The marking standards of various institutions and individuals on their teaching staffs are so widely divergent as to make it impossible to evaluate the quality of work done or the abilities of the students on the basis of marks alone.

This situation is almost certain to become worse rather than better. After half a century of rapid increase, enrollments in the schools are now actually decreasing. In the face of this situation teacher training institutions, threatened with decreased enrollments, will be subjected to greater temptation to offer more in-

Menace or Answer to Prayer?

Director, College of Education, University of Colorado

ducements to prospective students. Today there is an alarming and an increasing surplus of teachers and there are no adequate means of distinguishing between the inferior and the better teachers. Few institutions of higher education have adopted effective methods of weeding out unpromising candidates. As in other fields, the poor tend to drive out the good. They depress salary levels; they underbid good teachers in ways other than financial; lacking ability, they tend to rely upon political methods, servility and the prostitution of intellectual, professional and social ideals to the cause of "staying in" and "getting ahead."

The conditions, therefore, seem to call for some additional means of identifying the teachers and prospective teachers who are best prepared. A more reliable and accurate means of evaluating the quality and extent of preparation is sorely needed. The written examination offers much promise in this direction. Several objections to the idea of national teachers' examinations have been raised.* They should be carefully considered.

Dangers Are Not Obstacles

Most of them, however, are no more than dangers and are not insuperable obstacles. One of these is that the schools will coach their students for the examinations and neglect to develop growth along important lines that are not readily measurable in written examinations. This would, indeed, be unfortunate should it develop to any great degree. It does not seem probable that it will.

Much importance is, and will continue to be, attached to other factors, such as records of previous experience, appearance, apparent personality, abilities and training along such special lines as guidance and extracurricular activities and grades.

At least until the smaller schools begin to insist that applicants present examination records, teachers will not attempt the examination until several years after graduation. This fact seems to add to the likelihood that teacher training institutions will not shape their courses and instruction unduly toward passing the examinations.

In addition, the examinations to be used probably will cover so wide a scope that intensive coaching or cramming would have little effect upon the scores of the students.

What Are Ulterior Motives?

In evaluating the arguments, one must be wary of ulterior motives and interests. Those who are interested in schools with less scholarly staffs and student bodies will be certain to view the examinations with alarm and to oppose their widespread use. Those who are "test silly" and the representatives of the institutions possessing the best-trained faculties and ablest student bodies will be likely to favor their use.

It is not contemplated, as some fear, that applicants of varying abilities in all parts of the country will be required to make the same scores on the examinations. In fact, teachers will not "pass" or "fail" the examinations, but the employing agencies will be informed of the scores of applicants for positions and can place whatever interpretation they may see fit upon the scores.

There should be no national norms or averages. It is not logical to believe that preparing for and taking these examinations will result in producing "uniform" individuals. Their differences in personality, character, capacities and interests will remain as widely divergent as ever.

The use of these examinations should not necessarily discourage experimentation or progressive teaching in the schools; it should accelerate that type of teaching and ensure its success. The chances of successful experimentation are greater when the experimenter is possessed of adequate knowledge, as well as the originality and courage to experiment. It is difficult to believe that experimentation or progressive education is hampered by scholarship and information, in spite of the juvenile and the demagogic essays of those who would like to shed responsibility for knowing much in any field and, on the other hand, of those who emit platitudes about the "need for subject matter" and who grandstand with straw-men targets along these lines.

Perhaps the most important and the deciding factor will be the nature and quality of the examinations. If they should prove to be no better instruments of measurement than the so-called "culture examinations" (emphasizing detailed factual historical information about fields of culture) employed in the Pennsylvania studies, they would constitute a menace to teacher training and should be throttled promptly.

As described in the 1941 folder the examinations seem to be free from the major criticisms. They possess certain commendable characteristics: the examinations required of all teachers emphasize English comprehension and expression and current social problems and contemporary affairs; each optional examination covers fairly wide fields, *e.g.* the social studies, physical sciences and all of English. The latter feature should help to accelerate the tendency away from the intensive concentration of prospective teachers upon one portion of a teaching field, such as English literature or physics.

More Details Are Needed

It is unfortunate that the examination committee apparently cannot furnish specimens or much more detailed descriptions of the scope and contents of the examinations themselves. Lacking these, many persons will be skeptical and the friends of the plan will be at a disadvantage in explaining or defending the plan.

I have examined and evaluated part 3 on guidance of the professional examination (on education). It is fairly good in spite of its overemphasis upon vocational guidance and statistical measurements, the typical failing of the vocational educationist and many psychologists in approaching the problem and philosophy of guidance. However, there is no doubt that all the examinations will improve as those who prepare them become more experienced.

*Rowland, A. L.: Examinations or Credentials in Hiring Classroom Teachers, The NATION'S SCHOOLS **27**:53 (Jan.) 1941.

New Britain Builds Health

JACOB MELLION, M.D.
Director of Health Service, New Britain, Conn.

EVERY school in New Britain, Conn., public or parochial, shares in the services of a positive health building program. This program ministers to the needs of approximately 15,000 children from kindergarten through the senior high school.

Started 25 years ago, this health program has developed into a comprehensive schedule of services, based upon five special features: (1) a full-time staff of two physicians and five nurses; (2) an especially equipped health school caring for 92 underprivileged children; (3) periodic, instead of annual, examinations to allow for a more complete service; (4) parental consultations, and (5) numerous special services, including audiometer tests, tuberculin tests, medical attendance at games, preschool examinations and, in cooperation with local groups, diphtheria inoculations and well-baby clinics.

Unique in New England is the local health school, a building equipped with rest rooms, dining room, kitchen, an ultraviolet lamp room and special sight-saving classroom. Up to 100 pupils from grades 3 through 6 are admitted annually by consent of their parents upon recommendation of the school physicians. They remain from one to three years, receiving individual attention. The only setback seems to occur during vacation periods when progress laboriously built up is torn down by departure from schedule.

The health school program provides for about equal attention to classwork and health instruction and pupils returning to their own schools keep up with the regular program without special difficulty.

The sight-saving class, limited to 14, includes pupils with a vision loss of 20/100 in either eye and those recommended by an eye specialist for conservation care. Indirect lighting, adjustable top desks, bulletin typewriters, clear type textbooks, special paper and pencils are employed in conserving vision.

Right: One of the health rooms maintained in each school, showing the nurse treating a pupil. Below: The sight-saving class has special equipment and supplies, such as bulletin typewriters. Short periods of close work are followed by eye-rest periods when pupils engage in various handicraft projects.

Periodic examinations are given in kindergarten and grades 1, 4, 6, 8, 10 and 12 of all schools; these have superseded the annual examination, leaving more time for a thorough checkup in special cases.

Whenever defects are found, annual reexamination is made until the difficulty is corrected. Such examinations are conducted in the health room set aside in each school; pupils

dren's health. This does away with delay and confusion arising from attempts at an individual appointment system. Should a parent fail to report when requested, a home call is made by the school nurse.

Pupils showing marked defects are listed on an official record for special consideration. Following consultation day, the doctors meet with the faculty to discuss these cases and to

Left: Before school, pupils receive a glass of milk and a graham cracker; before dismissal, they are given milk or eggnog and a banana. Below: A regular half hour rest period is scheduled after lunch. Each child is provided with towel and blanket.

are stripped to the waist and are examined by the physician behind a screen.

Each child has a record of previous examinations, of treatments administered by the school nurse, of special situations noted by teachers. This information, kept up to date, forms a valuable basis for recommendation to parents, both in notices sent home and on consultation days.

Parent consultation days are not a new idea but their conduct here differs a little from that in many places. Immediately after examinations are completed in any school, a day is set apart on which parents may come at any time to consult with the school physician regarding their chil-

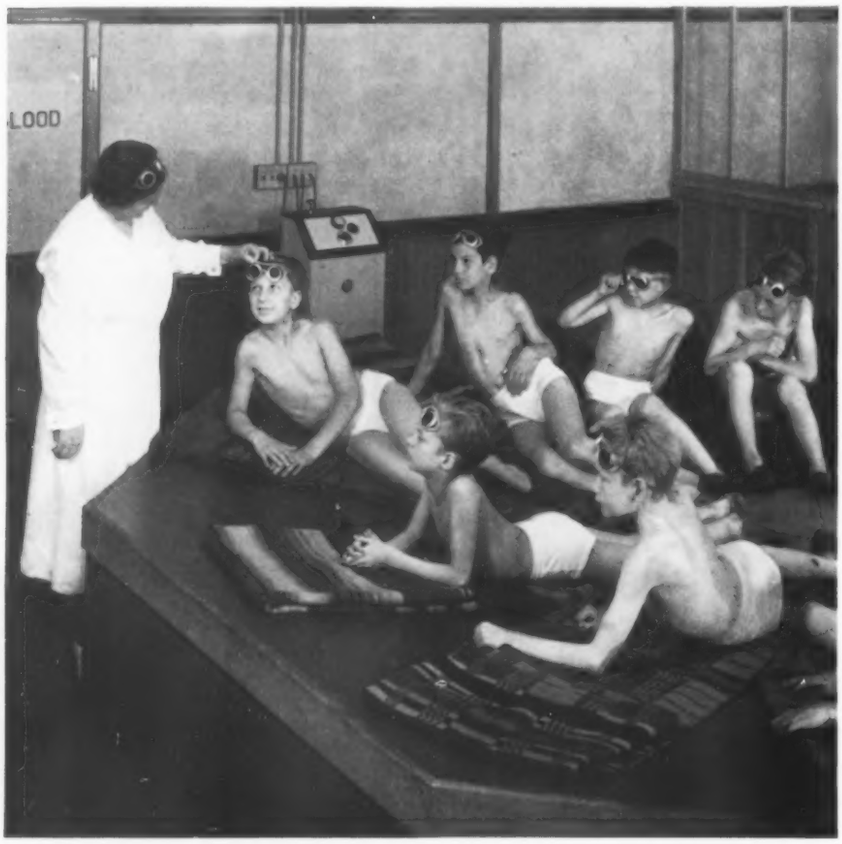
Pupils in the health school are weighed and measured by the school nurse once a month. The children are vitally interested in their own progress and each one charts his growth in his individual health booklet. Any loss in weight is carefully checked by the teacher, the nurse and the doctor. Every year a tuberculin test is given to ninth grade pupils. Those who show positive reactions are x-rayed.

take up problems of sanitation, lighting and teacher health.

Last year all elementary school pupils were given an audiometer test, which was recorded on their cards. This was administered individually instead of in groups to obtain a record of hearing in both speech and high-tone fields. Results showed the number of defectives in the high-tone range to be about equal to that in the speech range. Testing is to be done in this field annually in the kindergarten and also in the first, fourth, eighth and tenth grades.

A TYPICAL SCHOOL DAY IN THE HEALTH SCHOOL

Before school—Glass of milk and graham cracker
8:40—Haliver oil with viosterol tablet
8:40- 9.45—Classroom work (65 minutes)
9:45-10:30—Sun baths (up to 12 minutes); posture exercises; rest
10:30-11:10—Classroom work (40 minutes)
11:10-11:25—Outdoor play period
11:25-11:35—Preparation for lunch
11:35-12:10—Lunch
12:10-12:20—Teeth brushing
12:20-12:50—Rest
12:50- 1.05—Outdoor play
1:05- 3:10—Classroom work (125 minutes)
3:10- 3:20—Nutrition: milk or eggnog, banana
3:20—Distribution of bus tickets



The sun lamp operator stresses the importance of protecting the eyes with dark glasses while the pupils are under the ultraviolet lamp.

For eye testing, uniformly illuminated charts are employed to reduce errors resulting from variable classroom lighting conditions. In the case of both eye and ear tests, parents are notified of defects in their children and are advised to consult specialists. When failure to obtain eyeglasses is due to financial difficulties, a fund administered by a welfare group provides this service.

At the beginning of the school year, nurses weigh and measure all pupils, test their vision and record results, thus establishing a uniform system that is more dependable than the method of having each teacher check her own class. Daily first-aid work is done in every school by a nurse, who also checks classrooms for communicable disease, using a list made available by the board of health. Re-admission after an absence of three days or more must be confirmed by the nurse unless the illness is communicable, in which case the doctor must confirm it. Re-admission of children who have been quarantined must be approved by the board of health.

Participants in major sports are required to have a special examination by the school physician who passes upon their fitness to play or to continue to play in any game. In addition, the parents' consent must be obtained. The physician is present at all games, both regular and practice, to administer first aid; outside medical care for injuries sustained in play is paid for by the school department.

Every year a tuberculosis testing program is conducted in the ninth grades and the problem is discussed in the classrooms. The consent of parents is obtained before tests are administered but the use of the Vollmer patch test, which obviates the use of the needle, minimizes objections from the parents.

Pupils showing positive tests are x-rayed and reports are sent to parents and the family doctor. Follow-up x-ray examinations are made yearly on questionable cases. The entire program is given without cost to the individual, the expense being shared by the municipal board of health, the tuberculosis relief society and the board of education.

In addition to these services to pupils in school, a roundup of children who are to enter school in September is held in elementary schools every spring. About a week before examinations begin, kindergarten teachers hold open house to acquaint these newcomers with the school and to give mothers an opportunity to meet the teachers who will instruct their children. Following preschool examinations, nurses make home calls to check on defects requiring attention before children are admitted to school.

There is a close cooperation between the school medical department, visiting nurse association and other groups. By this means, special services are offered gratuitously to all children, both in school and out. School buildings are made available for neighborhood well-baby clinics, conducted weekly for children of preschool age and for inoculations against diphtheria. Thus, the health of New Britain's children is guarded zealously from infancy through high school.

The program is not yet complete, any more than any school program can ever be complete, but must keep changing, adopting modern practice as it is proved and amplifying its service to the community.

What Price the New Pattern?

GEORGE M. WILEY

Associate Commissioner, New York State Department of Education

Vast sums from Washington, such as H.R. 1074 would provide, must be viewed cautiously. Only too well do we know that he who pays the bills makes the terms, Mr. Wiley says by way of warning

DURING periods of strain and stress our educational program is often subject to superficial and even destructive criticisms. Such analyses, however, should be positive as well as negative. We should not only satisfy ourselves as to areas of strength but should also determine evidences of weakness.

The severe tension of life under such extraordinary conditions as obtain during a period of national crisis calls for increasing calmness and necessitates a care in evaluation that such an emergency all too seldom permits.

This situation is a challenge to the entire professional leadership in public education. It also offers a tempting field for those who see an opportunity to sow the seeds of revolutionary change in educational administration and control. Notwithstanding the Biblical injunction that "money is the root of all evil," the number of those who are willing to risk any serious embarrassment through the pursuit of such an objective is legion. This seems to be a reasonable assumption if one may draw his conclusions from the abandon with which federal funds are being sought to initiate, supplement or implement some phase or another of the program of public education.

The leaders of these activities, in their desire to promote the greater participation and influence of the federal government in the program of public education, uniformly marshal their arguments and introduce their supporting legislation under the timely caption "in the interests of defense." Even in the field of health and physical education there is growing evidence that we are about ready to bow down to the golden calf.

Among the proposals for the further extension of federal influence into the field of public education is the bill, H. R. 1074, recently introduced in Congress, providing for an annual appropriation of $200,000,000 to "assist in making adequate provisions for health education, physical education and recreation in schools and school camps."

To disarm those observers who question the growing influence and control of the federal government in the area of public education, the bill provides, as similar measures have heretofore provided, that the act shall "be so construed as to maintain local and state initiative and responsibility in the conduct of education and to reserve explicitly to the states and their local subdivisions the administration of their school programs in health education, physical education and recreation." The use of similar phrases and of extensive explanations, both oral and written, in connection with earlier federal education bills, is a matter of record.

No more effective legislative smoke screen was ever conceived than the subtle manner in which federal governmental authorities have been slowly, but nonetheless definitely, invading the area of public education, which, from the beginnings of our history until recent years, has been recognized as the exclusive function of the states. The early forensic battles that were waged in connection with federal aid for education turned largely on the question of "control." Eventually, for purposes of compromise and to lure the unwary who could not resist the influence of large monetary allotments, any reference to federal control was eliminated. More than that, phrases were inserted in the federal bills stating clearly that the control of educational policies must remain with the state or local authorities.

Anyone who is even casually acquainted with the manner in which large federal appropriations for education have been administered knows what has happened. Whether these illustrations are drawn from the area of vocational education or from the more recent activities of the National Youth Administration, the conclusions are obvious.

There is no such thing as federal aid without federal control. It is rather a question of degree, that is, the extent to which the federal administrative setup may control the program. That federal aid is justified in certain fields, many of which have to do with important defense problems, there can be no possible question.

When such projects enter into the daily program of health and physical activity for the children of the communities, however, and when a project is inaugurated that looks toward the setting up of school camps with even the limited type of remote control that such a bill carries, the similarity to youth programs in other countries under other types of social philosophy and ideologies demands careful attention and analysis before any final judgment is reached.

The lessons to be learned from other countries in relation to plans that they have developed for the purpose of ensuring solidarity and bodily vigor on the part of children and youths should not be drawn solely from recent youth movements or from national planning for youth control as developed in the past decade in Germany and Italy.

The long term implications of a project moving in such a direction may not be readily compassed in our thinking. The lure of immediate and heavy subsidies should not confuse us. It would seem wise that we examine those ultimate goals toward which such a plan leads and then determine whether our children are not being inducted unknowingly into a new kind of pattern or system of regimentation, the establishment of which we may later regret.

Incorporated in this bill for the promotion of health and physical education, including funds for the development of school camps, is found a provision that there shall be "adequate daily instructional and laboratory periods for all pupils to develop . . . physical fitness"; also, what are designated as "desirable social behavior and democratic ideals." The latter objective includes a field that is of vital concern in building character as well as citizenship qualities. It touches upon a field in which the home, the church, the neighborhood school, the boy scouts, the girl scouts and many other vital and dynamic organizations dealing with childhood and youth in the immediate community are deeply concerned. What administrative devices or instructional procedures may be developed or introduced through a program of camp life implemented by the federal government is difficult to foresee.

Importance of the Home

It would be well, however, for America to remember that basically the home is the most vital social institution in our whole national fabric. The school and church must continue to function as contributing factors in the area of character and citizenship building, notwithstanding all that may be done by those well-meaning enthusiasts who are impressed by the immediate results that large federal appropriations and high pressure administration may ensure.

To barter the democratic processes that characterize the administration of locally controlled units for large sums of money that a highly centralized government can furnish in unlimited quantity is to sell our democratic birthright. We should hesitate to embark on a program where the ultimate goal or destination is clouded in bewildering uncertainty.

Time for March 10, 1941, in commenting on the recent Atlantic City meeting and, more particularly, on the relationship of the National Youth Administration to the programs of public education carried on in the various states makes the following statement:

"Throughout the United States, in C.C.C. camps, N.Y.A. work projects and W.P.A. projects for youth, a new educational system is in operation, independent of the public schools.

"In many a community, N.Y.A. workshops have lately sprung up beside public schools, luring pupils away by paying them from $14 to $24 a month.

"N.Y.A. and C.C.C. now are spending $400,000,000 a year, a sixth as much as the entire public school system of the U. S."

Dissatisfaction Fomented

The extent to which the proponents of large federal aid and, therefore, federal influence in the control of public education take sheer delight in fomenting dissatisfaction with the present program of public education as carried on under long established state control is alarming.

No one knows better than school authorities the many limitations and weaknesses of the program of public education. No one who has been familiar over a period of years with the development of our present state-supported schools could deny that the work of these schools is constantly being strengthened. In the various states, the educational program moves forward in a democratic way subject to such limitations as the people of the state and the local school districts deem wise.

The influence of the home and of other local activities may at times seem to the visionary enthusiast a handicap. Let us observe, however, that while such local pride and concern may seem to the theorist an obstruction to change and reorganization, the home as an institution is nonetheless the cornerstone on which America rests. When the time comes that the control of education is shunted from the states and local communities to the federal government, as will happen if the present trend continues, the initiative and dynamic power that are found in local units throughout America today will give way to the master authorities in the central governmental office. In such surrender of local autonomy lies the ultimate regimentation of the childhood and youth of America.

Let us not be overwhelmed by what seems to be at the moment the physical fitness of people who are living under the mandates of dictators. We have only to examine the program of physical education and the methods which are used to ensure "social behavior" and democratic ideals in the democratic nations of Northern Europe. No finer illustration of individual physical fitness and bodily vigor has been observed in recent years than that shown by the people of Finland in their efforts to defend their country from the attack by Russia. Furthermore, this same little nation of Finland time after time has taken far more "firsts" in the Olympic contests in proportion to her population than any other country in the world. Her record and that of Greece demonstrate the effectiveness of the democratic approach and the democratic ideal. Here, the initiative has rested with the people. Spiritual strength, as well as physical prowess, can be found only in the homes of a people.

The issues involved in setting up a program such as that encompassed by the proposed legislation present a challenge to serious thought. Regardless of the language used in this bill in reference to "local" control and regardless of the political complexion of the authorities who may now, or at any later period, be responsible for its administration, the fact still remains that a state function is being "implemented" and, to a gradually increasing degree, is being influenced through the use of vast sums from Washington. Only too well do we know that he who pays the bills makes the terms.

Cost Must Be Considered

When the welfare of childhood and youth is at stake, not only school administrators but, even more, parents and patrons should be deeply concerned. Certainly, they should be willing to make no commitments until careful thought has been given to the implications of such a law and to the eventualities that later may have to be reckoned with.

One is, indeed, amazed at the ease with which the thinking of both professional and lay groups is so easily prostituted. If what we have known as the American school system is not guarded carefully, we shall suddenly awaken to find that we have sold our birthright for a mess of pottage. The sad part will be that when we awaken to that fact the control in all of these matters will have passed far beyond any opportunity for recovery.

Tell It to the Community

One Board Found It Worth While

B. M. KOHLER

President, Board of Education, Glencoe, Ill.

A MAN bites a dog. It is news. A board of education puts on a parent-teacher association program. Your editor calls it news. Here's the story of that unusual undertaking.

In Glencoe, Ill., we have what our superintendent calls a program of social interpretation. In our language this means taking the public into our confidence. In accordance with our policies, members of the board of education cooperate with other individuals and groups in making this program effective. We are expected to assist in interpreting the community to the schools and the schools to the community. The job of interpreting the community to the superintendent and teachers is a larger one than at first might seem apparent.

Like other American communities ours is composed of individuals and groups with various notions concerning the way in which schools should function. Accurate interpretation of community needs and interests is, therefore, something that requires patient and continuous study. An active parent-teacher association has been of considerable help to us. Over a period of years this organization has sought the active cooperation of the parents in programs designed essentially to reveal what the community expects of its schools. Recently, a community council composed of representatives of more than 30 local community groups was organized. This agency also has helped to make articulate the many and varied demands upon our schools.

Interpreting the Educator

Difficult as the task of interpreting the community to the schools may be, the task of interpreting the schools to the community assumes even larger proportions. Professional educators talk a strange language. They seem to emphasize personality development more than the three R's. We don't object to a reasonable concern about personality but we know that parents expect their children to learn to read and write and figure. It has become necessary for us, therefore, to know what the educator means when he talks about integration, correlation and function.

The new education places much emphasis upon making things interesting. We become a bit skeptical because life has taught most of us that work must accompany play and that the world of reality is not all sweetness and light. We have had to learn that "interest," as the modern pedagog uses it, does not necessarily mean that learning is all a bed of roses for the children. We recognize that it is something more significant that actually can result in the kind of concentration and application that we approve.

Education Is Sound

As board members we are learning that present day education is essentially sound. We realize that it is concerned with the achievement of age-old values but is seeking to achieve these values more effectively. We are becoming convinced that change in education is just as inevitable as change in every other area of human endeavor. Thus, as bankers, manufacturers, engineers and housewives we have attempted to understand and then to do our part in interpreting a changing education to our constituents.

Until last autumn our teachers and administrators were quite satisfied to let us interpret the schools informally and incidentally. As we rode to the city with our fellow commuter we attempted to explain that his children really learned obedience in our schools. We told him that the new kind of discipline was better than the old because it was based upon the child's understanding of his responsibilities to the others with whom he worked and lived rather than upon fear.

Across the bridge table we sought to allay the fears of an anxious mother who was quite sure that her Mary was not learning any arithmetic. We had seen neatly constructed charts that indicated that the achievement of our children in arithmetic compared favorably with national averages and standards.

Board's Problems Made Public

Our teachers, administrators and parent-teacher association officials, however, were not satisfied with these informal efforts. They insisted that the board of education present a symposium for one of the meetings. We were to discuss the policies of the school system and then submit ourselves to any questions that might be directed at us. Having put our caution aside in exposing ourselves to cross-examination by the parents, we decided to lay all the cards on the table. We would talk about the most troublesome policies and problems that confronted us.

One of our members reviewed financial problems and achievements covering the period of the last ten years. This résumé revealed that the school district was in excellent financial condition. It showed that approximately $600,000 worth of new buildings had been added to the school plant since the depression days of 1929 and 1930. Of great interest to the audience was the fact that these additions had been made without incurring any new indebtedness. The board of education had paid for the buildings with the help of P.W.A. grants out of its cash reserves. Of equal interest to the audience was the fact that the entire bonded indebtedness of the school district would be paid during the next fiscal year.

Then the patrons were reminded of the responsibility that they must assume in this connection. A heavy tax delinquency was still making it necessary for the board to maintain a relatively heavy tax rate and to operate a slightly restricted program.

Another member of the board discussed the program of community

activities that is developing within the village. He explained that we were anxious to make our school plant facilities widely available for use by all community agencies. He pointed out that the board of education was limited in its ability to finance all of the demands that were being made upon it. A tax limitation imposed by the state legislature limited the funds that were available for schools. He made it clear that the board of education could not continue to spend funds primarily intended for the education of children for community purposes.

The result of his explanations was the appointment of a committee by the community council to investigate new sources of revenue for the developing program of community activities.

One of the women members of the board explained the many opportunities offered to parents for active participation in the educational program. She urged parents to volunteer their services as assistants in the libraries and arts and crafts shops. She explained that the schools could also use them in the capacity of guides for parents and visitors. This member presented the outlines of a new conference plan that was being inaugurated at the beginning of the school year. The purpose of the plan, she explained, was to provide at least one personal conference between every parent and teacher during the year. The conference plan was to supplement the written home contact reports now in use and was not to be interpreted as a substitute for these reports.

The need for a school bus that could be used to transport children on excursions throughout the metropolitan area was also presented.

Another member of the board whose father had been a school teacher explained the curriculum program in use in the schools. He said that in Glencoe we spell progressivism with a small "p." He emphasized the fact that our educational program provided for continuous study and evaluation to the end that services to children might be continuously improved. It is in this sense, the member insisted, that our schools are progressive and not in the sense that we encourage dramatic innovations solely for the purpose of being progressive.

Another woman member of the board sought to elucidate several touchy subjects. She pointed out that boundary lines between the various schools were not changed simply to inconvenience parents and make their children unhappy, but that these changes were made solely for the purpose of achieving an equal distribution of children at each grade level. Such a distribution is, of course, necessary if the most effective results are to be achieved.

The policies of the board of education covering admission requirements to the kindergarten were presented. The member explained that we did not admit children under 5 years of age to our kindergartens unless we had considerable evidence of their readiness to justify such a departure from our rule. She attempted to show that our policies had been adopted in the interests of the children themselves.

In general, this account indicates the nature of the program that the board presented to the parents. There were questions. We answered all of them without the help of a single teacher or of the superintendent of schools. One parent who asked why eighth grade children were allowed to teach second grade children to read seemed reasonably well satisfied when it was explained to him that the reason we did so was not for the purpose of economy but because the association of children of different ages and grades tended to develop desirable social attitudes and ideals.

Another parent who thought that the board of education might make a profit by charging community groups for the use of school plant facilities seemed to be satisfied when it was explained to him that the board wished to assume a certain responsibility for the education of adults as well as of children.

We accepted this particular assignment somewhat reluctantly. Our experience convinced all of us that it was extremely worth while.

Good teachers and good administrators are necessary if we are to have good schools, but they can't do the job alone. They are entitled to the cooperation of a board of education that is seeking to carry its share of responsibility as intelligently and courageously as possible. Even accounting publicly for one's stewardship isn't so bad after the first few minutes of stage fright disappear.

Mr. Askren Sets a Record

MORE than 200,000 miles of driving without so much as a dented fender is the record achieved by George Askren, school bus driver of Warren Township, Indiana, who completed twenty years of service on January 1. Furthermore, Mr. Askren, acclaimed as Indiana's No. 1 school bus driver, has never had to change a tire on the road, nor has he caused even minor injury to a passenger.

Estimating the average distance between home and school at 3.2 miles he is credited with transporting safely 500,000 pupil passengers and driving 1,600,000 passenger miles.

This achievement becomes even more creditable when it is realized that Warren Township adjoins the city of Indianapolis, making it necessary for bus drivers to cross main highways during morning and afternoon hours when the traffic to and from the city is at the day's peaks. At the present time Mr. Askren transports three loads to and from schools daily; in doing this he drives 73 miles daily, making 28 federal and state highway crossings and 16 railroad crossings. There are 180 school days each year; thus, he crosses state and federal highways 5000 times and railroads 2800 times annually with his load of pupils.

Mr. Askren has failed only once to get his charges to school on time and this one tardiness, in 1938, was caused by icy roads.

Several safety devices that are now standard equipment for all school buses were used by Mr. Askren long before state-wide use was common. He has always been able to handle his own bus problems and has never found it necessary to call on school authorities for assistance.

Mr. Askren has transported pupils for Warren Central High School since its completion in 1924. Before that time he drove for Shadeland Grade and High School.

Portfolio of

GENERAL FURNISHINGS

Above: Kindergarteners at Joseph W. Mauck School, Hillsdale, Mich., enjoy delightful surroundings. Below: Foyer of Thomas School, Lansing, Mich.

FURNISHINGS for school buildings are in a period of transition. The typical school interior of the past was a prosaic affair. Most conspicuous were its fixed seating, its coat rooms, its wood floors, its excess of blackboard and, unhappily, its complete lack of esthetic values. There was need for change.

Today a new theory of pupil activities to supplement bookwork is in operation and this change in the philosophy of education is being reflected in movable seating, floors of resilient materials and acoustically treated ceilings. Color, hitherto ignored, has been introduced in the modern school interior through practical and beautiful finish materials and is even incorporated in the furniture, which has been redesigned.

Until recently it would have been considered a waste of public funds to include decorative materials and original artcraft in the construction and furnishing of a school. Indeed, such finish materials as were then available, *i.e.* marble, bronze and gold leaf, were out of reach of the

Decorative Trends

MRS. M. V. ORR-ROSA

Interior Decorator, Warren S. Holmes Co., Lansing, Mich.

ordinary school budget. At present, innumerable new materials, resilient, plastic and acoustical, have been perfected through advances in industrial chemistry and physics in response to public demand for beauty combined with utility and economy.

The use of these finish materials in schools, therefore, is now made possible at a cost that is well within the appropriations available for them. Moreover, parents and taxpayers alike today realize that much that is both cultural and practical must be found in the environment of the school.

There is an old saying that "art is caught, not taught," which is equally true of other things that stimulate interest and ambition in pupils. The designer now has at his elbow a host of excellent craftsmen who are ready and able to execute his original designs in the various mediums of new floor, wall and ceiling materials, in addition to all manner of decorative details, such as wood carvings, stencils and glass panels. In fact, manufacturers vie with one another to make their products not only more useful but more attractive as well and are eager to cooperate with the designer in carrying out his ideas.

The atmosphere of the modern school interior is felt at the very entrance where glass doors frame a view of an attractive interior, inviting and interesting to the child. What the reception hall is to the home, the foyer has come to be to the school—a charming, gracious place of welcome.

The foyer should have outside light whenever possible, colorful window hangings, built-in exhibit cases displaying the pupils' best work and choicest treasures, built-in seats that invite children to stop and chat before proceeding to their classroom workshops, pleasing colors in floors and walls, attractive lighting fixtures and, perhaps, a good bronze or picture, a decorative plant, a shield or a flag in evidence. Through such decorative treatment the foyer will become one of the most educational rooms in the building, even though no teacher and no subject are assigned to it.

Corridors also have taken on new character. No longer are they simply necessary tunnels used to get to and from the classrooms but they perform a housing function for pupils' wraps, books and supplies by means of the ventilated steel lockers that are neatly built into the walls. Corridors are now well lighted, cheerfully decorated and provided with

Second grade classroom at Carl Bailey School, Hillsdale, Mich.

tackboards and exhibit cases for the children's work. Here and there a seat is built in. The wainscots of corridors, walls and stairs and the drinking fountain recesses are constructed of beautifully colored tiles, interspersed with picture tiles that depict bits of humor or illustrate the lessons.

In the classrooms proper, the consideration of furnishings should begin with the architect's sketches of the building. In this way a well-integrated plan is designed and costly, ill-afforded mistakes in the purchasing of furniture are avoided.

Up-to-date lighting equipment, acoustical treatment and modern furniture make study a pleasure in the Central School library, Greenbush, N. Y.

The design and type of seating are of paramount importance in the original plans as the seating must function together with the storage, display and work features and the type of flooring to be used. It is desirable that classroom furniture be unencumbered with drawers and mechanical combinations, for simplicity greatly facilitates flexibility and freedom of action and fosters good taste.

Not so long ago, the school custodian thought it his duty to destroy everything from the shelves and cupboards of the classroom at the end of the school year. In contrast, classes are now encouraged to make collections in many fields of art, science and history that are valuable for teaching purposes. These are handed down from one class to another and become a real part of the classroom's furnishings.

Contributing greatly to the well-furnished classroom and stimulating its work with emotional appeal are reading cases, exhibit cases, tackboards, blackboards, interesting books and magazines, window sills with potted plants, animal and vegetable specimens for observation and study and a planned decorative scheme.

Manifestly, it is not the classroom that is perfect and complete in every detail of furnishing and decoration that is desired but, rather, the classroom that suggests desirable things for the pupils to do, that provides for their own work and that has esthetic appeal. The character of the classroom should be so dominated by the pupils and the work they are carrying on as to be capable of having its appearance materially changed by them from week to week, if desired. No type of school furnishing is so ineffectual as that which gives the classroom the same appearance day after day and week after week or, what is even worse, year after year.

The integration that is achieved when the furnishings for elementary school classrooms are developed from the pupils' needs, with particular reference to the subject matter to be taught and to the pupils' interests at a certain age, is most desirable and results in each classroom's being somewhat different in its architectural and decorative features. This difference is greatly accented, in turn, by the work displayed in the various rooms.

For high schools, the furnishing requirements of science, shop work and home economics will largely provide these rooms with their own characteristic environment, but such subjects as languages, history and civics benefit greatly if the furnishings and architectural design endow the classrooms with related environment.

For example, interest in the study of English literature is greatly enhanced in a classroom that is provided with a stage and is detailed in the Elizabethan style. Similarly, the social sciences might well be taught in environments that reflect the Early American period.

Spanish is likely to be little more than dry grammar if it is taught in an unimaginative room, but if the classroom is equipped with a short-wave radio so that programs can be tuned in from Mexico and the South American countries; if the cabinets contain a supply of photographs of Mayan, Aztec and Indian art and architecture, and if the reading case displays current newspapers and magazines and books from these countries, the course becomes cultural and informative.

To ignore the existence of emotional appeal in the furnishing of the school is to deny child psychology and to miss much of the contribution of art and science to education. Indeed, these emotional qualities may be made the finest product of education and its chief value.

The school building itself, of course, can never be made to supply the experience and emotional values necessary to youth education but, just as the stage setting is an integral part of the play, so must the properly furnished school building function for education.

How to Treat Student Rooms

ROSALIE S. GODFREY
Business Director of Residence Halls, University of Texas

LIVING accommodations are important in the life of the college student, whether they are residence halls, boarding houses, sorority houses, fraternity houses or private homes. Outstanding colleges and universities in the United States have set high standards for student housing by providing residence halls that are carefully planned, furnished and operated.

In order to be satisfactory, student rooms must be furnished so that they not only meet the needs of the users but also fit into the budget of the owner. This can be accomplished only through careful study and planning. The user requires adequate and suitable space, furnished in a comfortable, convenient and attractive manner at the price he can afford to pay. These requirements can be met by providing reasonably priced rooms that afford comfortable sleeping accommodations, adequate and well-lighted study facilities, suitable storage spaces for personal belongings, convenient dressing areas and comfortable surroundings for spending leisure time.

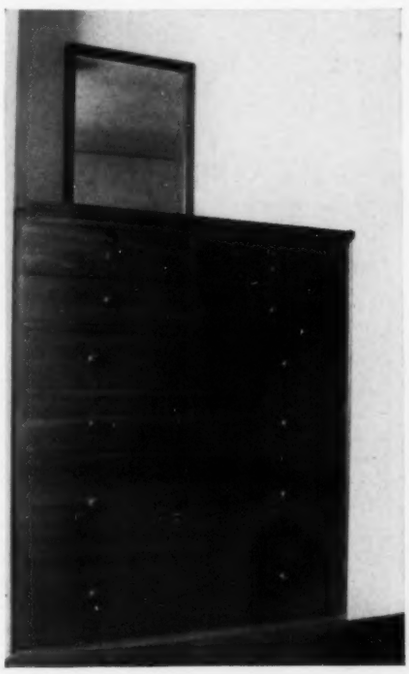
In addition to these essentials the owner must consider both the initial costs and the cost of upkeep, repairs and replacements. Because of these factors, it has been found that well-constructed furniture is the most economical in the long run.

In planning for a residence hall, the wise owner thinks in terms of suitability and durability and considers as a whole the architecture of the residence hall, the policies that will govern its operation, the amount to be charged for the student room and the selection of furniture and furnishings.

For example, the architecture, including wall finish, floors and built-in furniture, not only affects the cost of upkeep but influences the selection of movable furniture, floor coverings and window treatment. The policies of operation, such as the care and cleaning of rooms and the furnishing of bedding, dictate the furnishings to be purchased and the room rental rate. The income from the rooms, the amount of money on hand and the architecture of the building affect the selection of the furniture.

Above: Student bedroom in the Asenath Carothers Dormitory for women. Below: Built-in (left) and movable (right) chests in use in dormitories.

The residence halls for women at the University of Texas, which are owned by the school, have been furnished in different periods in order to give the students wider experience, to appeal to different tastes and also to add interest to the dormitories.



STUDENTS' ROOM CHAIRS

Some few articles of furniture, such as beds, study tables, study chairs, mirrors and chests of drawers, are common to all student rooms. The other items to be furnished depend upon the ideas, opinions and judgment of the owner; the amount of rent to be charged; the furnishing budget, and the common practices of the community. Therefore, the furnishing committee should first adopt a policy regarding items to be supplied before making further plans.

The following is a fairly complete list of furniture and other articles that might be supplied in a room:

Bed, including springs and mattress
Bedding: mattress protector, sheets, pillow cases, blankets, counterpane

Desk	Glass curtains
Study chair	Venetian blinds
Draperies	Towels, bath and
Window shade	hand
Easy chair	Dresser scarves
Chest of drawers	Lamps
Dressing table	Bookcase
Mirror	Pictures
Rug	Drinking glass

Wastepaper basket

If the plans for the building, the operating policies, the income and the furniture selection have been thought of together, then the advisability of having some furniture built in will have been given careful consideration before construction is begun.

A master's thesis entitled "The Comparative Initial Cost and Upkeep of Built-in and Movable Furniture for Residence Halls Student Rooms as Determined From Ten Buildings Housing University of Texas Students" was written by Marian Draper in 1940 and is on file in the University of Texas Library.

Miss Draper reports that "where style and size are comparable in this study, the cost of built-in chests of drawers, even though the material, construction and finish are slightly inferior, is approximately three times the cost of movable chests of drawers." In regard to upkeep, she found that "whether or not the top surface of the chest is exposed to wear rather than whether the chest is built-in or movable affects the amounts of repair needed."

The movable and built-in chests of drawers illustrated are some of those that were included in Miss Draper's study. Rooms with built-in chests of drawers have many desirable features, but before built-in furniture is selected the construction should be carefully examined.

It will be noted that the number of large drawers and small drawers in both the built-in and movable chests is divisible by two because they are used in double rooms. The drawers in the movable chests have dovetail construction at all corners. Whether the chests of drawers are built in or movable, they should be well constructed and finished and should have an adequate number of drawers of usable depth.

DINING ROOM CHAIRS

One of the most satisfactory and most widely copied pieces of furniture in the student rooms at the University of Texas is a combination bookcase and desk with lamp. It was estimated that a usable double desk should be 38 inches long with 48 inches between users. A bookcase was designed at one side for the sake of convenience, space conservation and economy. These bookcases have 10.5 running feet of shelf space and add about 20 per cent to the initial cost of the double desks. Indirect study lights with metal shades are fastened in the center of the desk through wooden collars that serve as bases for the lamps. Miss Draper reported that "the initial cost of the built-in bookcases studied, based on the running foot of shelf space, is approximately three times that of movable ones."

The beds selected should be suitable to the period, adequately large, economical as to upkeep and replacement and within the furnishing budget. Wooden beds of honey colored maple were selected for our Jessie Andrews Dormitory and of bleached maple for Carothers Dormitory. They are equipped with high grade coil springs and first grade cotton felted mattresses. The side rails were manufactured as a part of the springs and locked into the bed ends. This added to the rigidity of the beds and lessened the cost of the complete bed.

In contrast to the beds selected for the women's residence halls are those purchased for Hill Hall, the athletics dormitory. These are iron beds with heavy ribbon strap springs and well-constructed inner spring mattresses. The springs manufacturer recommended the ribbon type of spring as being more durable than coil springs for people as heavy as football players. This bed and mattress cost considerably more than the ones in the women's residence halls because of the cost of the mattresses.

Easy chairs should be comfortable and durable. Those illustrated are of this type. They have wooden arms and the seats of the chairs can be removed by taking out a few screws. The seats can be sent to the upholsterer, along with the back cushions, and require only a comparatively small amount of material and labor for reupholstering. An upholstery fabric of fairly low cost may be used so that the room can be inexpensively freshened by occasionally reupholstering these chairs.

One of the most difficult pieces of furniture to select is the study chair. It should be comfortable for people of varying sizes, sturdy, suitable for its purpose and have good lines conforming to the period of the room.

If the furnishing budget is low, it is difficult to find student desk chairs that meet all these requirements. Suitable student room chairs at varying price levels, selected from those in use at the University of Texas, are illustrated. These chairs have been

in constant use in buildings that have been open from three to fourteen years.

It has been found satisfactory in some residence halls to furnish venetian blinds in the student rooms in place of window shades, thus obviating the expense of glass curtains and draperies. Venetian blinds afford privacy and at the same time permit a circulation of air.

Well-constructed furniture and long-lived fabrics, while more expensive in the beginning, have proved to be economical because they minimize the need for replacements. By careful selection and purchase, the initial cost of durable materials can, in many instances, be reduced.

The Call for Color

FREDERIC P. WIEDERSUM
Architect, Valley Stream, Long Island, N. Y.

TODAY, color is an essential feature of the school building, costing little but materially enhancing its beauty and interest.

Color for classrooms should be selected for beauty and restfulness, rather on the conservative side, so that the pupil's attention is not distracted from study. Simplicity in design and orderly arrangement and composition of materials are of extreme importance.

The walls of rooms that have a north exposure should be treated in agreeable tints of subdued yellows or peach-tans, preferably smoky pastel in value. In other rooms, soft powder grays, greens, blues or light warm brown tints may be used. Neutral tones are desirable in art rooms as a background for the display of art and color projects.

If the woodwork in classrooms is painted, it should harmonize with the wall tones; if varnished, it should first be stained or treated so that it will not contrast sharply with the color scheme.

Exposed mechanical equipment, grilles, radiators and unit heaters should be finished so as to be as inconspicuous as possible and to blend with the wall or background color. Classrooms are greatly enhanced in beauty and color by the use of colored floor coverings, such as asphalt and rubber tile, jaspé and battleship linoleum. Ceiling colors must be confined to light tints in order to reflect the maximum light.

The possibilities for decoration, color and furnishing of homemaking classrooms are unlimited. Kindergartens give the decorator the greatest opportunity for the use of color. The toyshop and the circus should be the inspirations for the decoration. Color and design can be carried out in the spirit of the child's mind with curves and designs in cartoon form, slightly out of scale, and with colors bold and bright.

In the kindergarten of the elementary school at Sayville, L. I., the wall treatment is painted wood, with small plaster spaces for the application of wallpaper, which is tinted a light tone of peach, with designs of deep robin's-egg blue, bright crimson, brownish gray and pink. The main color of the woodwork is treated in one tone of deep robin's-egg blue; the niche and sides of the molded posts are in deep mahogany and red; the ceiling is a light yellow.

The linoleum floor is mahogany red with white feature strips and special game insert areas of colored linoleum of marbleized black, green, orange, blue, red and yellow; they are purposely bright so that the children can identify them. The doors have been finished in natural birch with applied decalcomanias of nursery subjects.

All the details in another kindergarten were thrown hugely out of scale so that the children would feel as if they were in a fairy palace. The great fireplace and chimney are built of natural rock boulders with a brick and stone shelf and a gaily painted imitation oven door. The walls are sand finished plaster of a dusty ochre color with inserts of native boulder rock, brick and slate. The doors are painted a bright malachite green with black hinges. The windows have cut-out valance boards with simple peasant-like stencils of flowers in conventional designs decorated in various colors. Ornamental animal cut-outs above the architrave of the doors were

Above: The kindergarten at School No. 3, Baldwin, N. Y., looks like a fairy tale palace with the huge fireplace of natural rock. Left: The foyer of the Baldwin school auditorium is designed to arouse the interest and imagination of the patrons who attend the plays that are put on by the school.

sawed out of plywood with pictures of animals painted in flat, bright colors.

The curtains on the windows are a Snow White and the Seven Dwarfs pattern, with brigh crimson, yellow, green, brown and gray figures on a powder blue background.

The school library is a place for research and study where absolute quiet is necessary. All walls should have bookshelves filled with books

that give color interest to the room as the textures of the books add warmth. Simply designed bookcases and wainscoting lend a dignity that distinguishes these rooms from the average classroom.

The feeling of natural finish hard wood gives an intimate warming touch to a library. Colors selected for walls and ceilings should be of restful pastel tints, which are good reflectors of light.

The built-in woodwork in the memorial library of Wellington C. Mepham High School, Bellmore, L. I., is of oak-stained cedar. The walls are painted in four bands of yellow, ranging from deep yellow at the bottom to light at the top, with four ornamental plaques painted white with a wedgewood blue background. The ceiling is light wedgewood green with plaster ornament picked out in white, and the beaded ornament around the oval dome is white and gold. The dome itself is a very light tone of yellow.

The floor is composed of large rubber tile squares in colors of dark golden brown and mustard yellow. Draperies are mohair of chasing fret pattern with a light beige background, the pattern being picked out in chocolate brown, white and light salmon. The furniture is especially designed of Appalachian white oak.

Above: Principal's office at Southold Grade and High School, Southold, L. I. Below: North Merrick Grade School auditorium, North Merrick, L. I.

Agreeable results were obtained for the principal's office and board room in one school through the use of low wainscoting and especially designed trim and cornices in white pine. The woodwork was painted French gray, with the walls and cornice a putty gray much lighter in value; the ceiling was tinted the color of the walls. The doors are rich, natural mahogany and the draperies, deep plum color with small decorative markings. The floor is covered with blue jaspé linoleum with a border of deeper blue.

A combination principal's office and board room is this attractive office at Westhampton Beach School, Westhampton Beach, L. I. The walls are paneled in natural finish knotty pine and the chairs are mahogany with green leather covering.

A second combination principal's office and board room is treated with natural finish knotty pine, with an oyster white ceiling and special jaspé linoleum floor. Draperies are deep burgundy, white, green and yellow. Chairs are mahogany with a dark green leather covering.

Vestibules and lobbies of auditoriums should be treated so that they achieve the same quality of elegance as the auditorium. Because pupils today produce plays and musicales to which the public is admitted, these rooms should be treated in the same manner as a theater inasmuch as the introduction of color and ornament stirs the emotions and imaginations of the patrons who attend the performances.

The lobby of one school auditorium was treated with a low wood wainscot and architectural features around the door of painted white pine. Paneled doors are birch stained and waxed a natural finish. The woodwork is painted old ivory; the walls, a dusty yellowish gray. The plaster plaques are white, with a deep mulberry background. The ceiling is tinted a light putty color and centerpieces are white and smoky greenish blue. The medallions are decorated in smoky yellow with blackish mulberry accents. The marble base is verd antique and the field of the terrazzo floor is composed of yellow Verona chips with cardiff green squares and black cement.

Another effective lobby was designed with woodwork and cornices of painted white pine, marble base, terrazzo floor, applied stock plaster ornament and mahogany doors. The woodwork is oyster white and the spandrels at the arch are wedgewood blue. The marble base is black with terrazzo floor of Botticino chips and black marble chips with black cement. Doors are mahogany stained and finished natural with a high French polish. Four murals in the corners of the lobby depict the first four schools in the United States.

When auditoriums and gymnasiums are combined, color and decorations should be somewhat restrained and practical. Excellent results were obtained in one school by using knotty pine woodwork with a waxed finish. The walls are painted a light gunmetal brown and the ceiling is light yellow acoustical tile. Draperies have a light, smoky salmon background with a floral pattern of cerulean blue and henna flowers, green leaves and patches of grayish lavender. The cyclorama is beige.

When auditorium and gymnasium are separate, the auditorium should be designed as a conservative theater. The walls of one that was completed recently are lined with flush-paneled American walnut and book-leaf matched panels. The doors are inlaid with strips of burled myrtle, including disks on either side. The stage front is faced with vertical grained American walnut. The trim around the doors and the top of the wainscot is American walnut stained darker for contrast. The molding either side of the stage is solid Botticino marble in three sections. The rear of this auditorium is treated with acoustical tile set in checkerboard fashion and decorated in two metallic colors of yellow and copper.

The decorative map on the wall is 80 feet long painted in antique colors of blue for the water, yellow and green for land and red for roads, with other subtle coloring of focal points of interest decorated in black, white and gold. The ceiling is acoustical plaster, colorful with yellow ochre. The plaster frieze around the indirect lighting trough is decorated in blue, black, orange, yellow, white and gold. The floor is asphalt tile in two tints of smoky sea green with dove gray inserts.

Stage draperies are of monk's cloth with a stencil pattern in colors of brown, sienna, blue, red and gold in modified Grecian style.

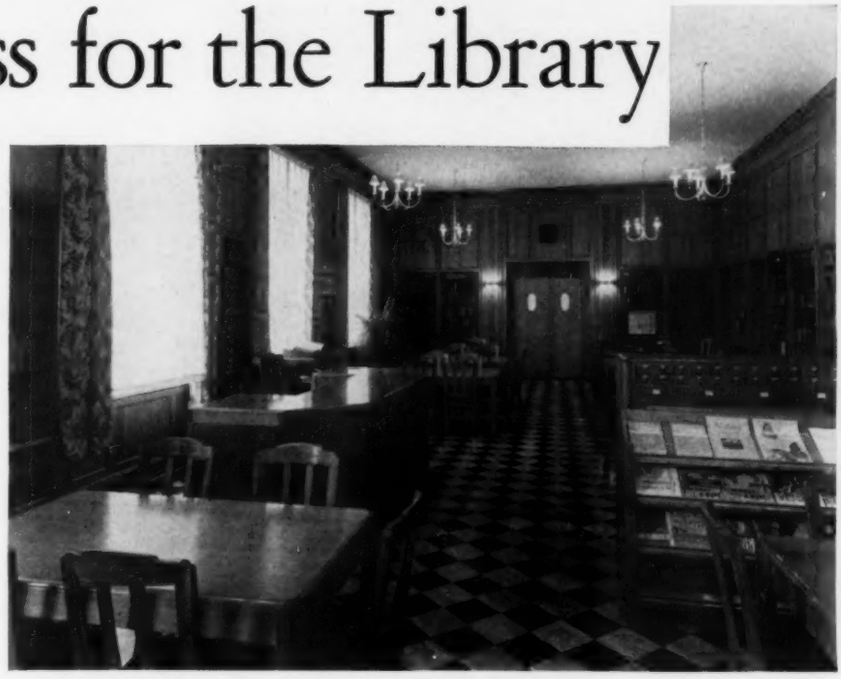
Color need not necessarily be omitted from gymnasiums and many interesting combinations can be obtained. The wainscot may be of glazed terra cotta in a gray-peach color, with bands of deeper chocolate brown. The walls may be painted a much lighter gray-peach with an acoustical ceiling of light yellow.

A small balcony at the end may be treated as a small porch with a striped awning that has a scalloped valance, painted white and vermilion, with a sky-blue background for the walls; the rails are taupe. Doors and woodwork of stained birch complete the setting.

New Dress for the Library

ELIZABETH MADISON

Supervisor of Libraries
Oakland Public Schools, Oakland, Calif.



This attractive library is in the Pulaski Central School, Pulaski, N. Y.

ONLY recently have school libraries begun to take on the hues and forms that most appeal to children. For some reason or other, our ancestors regarded education as an abstraction that could be objectivated only in something gray, gaunt and near-terrifying and education has had all too close and brotherly a contact with punishment. We remember John Muir's comment that he "learned Latin through the skin." A reminiscent leaf-turning of the New England Primer reminds us how serious and how gray were the early learning days of our not too distant progenitors.

With the coming of the kindergarten came the children's garden-of-books. Colors that could be enjoyed, laughed about and sensed with gaiety began to be included in the planned environments of children. Small tables, painted chairs, large open windows and flower boxes slowly came into children's libraries.

The public schools, however, were slow in admitting that times had changed in the matter of library fittings for young people. Tall, forbidding brown bookcases, which had been proudly set up in high schools and junior high schools, still retained their dark influence in the "book of standards." Librarians found that they were repeating the cycle of history, struggling with enthusiasm to obtain "standards" for library construction in schools and then discovering that these standards hampered them in further development, so that it was necessary to renew the struggle for better and different standards.

As long ago as 1920, a vigorous superintendent of the public schools of Oakland, Calif., Dr. Frederick M. Hunter, listened to the timid plea of a new supervisor for colored book shelves in the elementary school libraries. One day he called in the supervisor and said: "An old room is being made over at Lafayette School. It is going to be a library and you can try out various paints."

Thus, Lafayette became the first school in Oakland to see the startling innovation of colored book shelves. A light gray case, with edges painted jade green, was our first attempt to introduce a sense of visual well-being into the home of books. Much discussion arose among faculty members but the pupils liked the change.

From then on, most of the elementary school libraries took on a light and cheerful dress of delicate gray touched with green or sometimes with blue. Now we find principals, teachers and color planners objecting to the "too drab grayness of some libraries."

Further experimentation was made with color when a portable building at Sherman School was offered for a library. Its size and shape suggested the early farm buildings of Spanish California. This idea was seized upon as the decorative theme, and the portable library finally appeared with a blue ceiling, like the early Spanish houses; cream adobe-colored walls, and shelving tinged with the beloved tile-red of Spanish days.

The idea was further carried out by the Southwest Indian jars used as decoration and the strings of red and black peppers that hung between windows. Later, the desks were colored cream or blue and the broad window sills were rendered in a harmonizing tone. Thus, the portable-building library, which had offered a free place for experimentation, served to stimulate our bravery.

When Cole School was rebuilt, with its fine, well-equipped library on the second floor, a study was made, with the help of Frances Eby, art supervisor, in warm and cool coral tones; the outsides of the shelves were in one tone and the backs, sides and upper boards of the "cavity" of the shelves were rendered in another tone. This has proved to be a delightful combination, giving depth and a shell-like quality to the shelves.

The linoleum at Cole School was planned to harmonize with the walls. A large inset map of the hemispheres, in dull reds and blues, with symbols for the winds and tides, was set into the linoleum blocked floor. The shelves and window ledges are dark blue, the sides of the retreated windows and certain pinning spaces are pale Chinese yellow.

Both children and faculty members enjoy meeting in this room. This fact is interesting because the first criticism of the room was that it was "too stimulating." However, further experience with the environment has proved it to be soothing.

Another room to receive special thought in color organization was

The circular construction of the library at Rushville Central School, Rushville, N. Y., affords ample illumination. Draperies in a floral pattern add to the cheerfulness of the library.

Golden Gate Junior High School library, in which a study in yellow and yellow-green was introduced with the help of the new art supervisor, Alice Schoelkopf.

From this time on, under the leadership of Supt. William F. Ewing, the planning of color organizations has rested with the architectural department, headed by Charles A. Whitton, in collaboration with the art supervisor. A recent example of the pleasing results obtained by this combination is seen in the new Piedmont Avenue Elementary School library, in which delicate rose and mauve set the color tones for the room and harmonize with the rest of the building.

Various principals and schools have taken up the challenge of special interest in the library. An example of this occurred at Santa Fe School, where the principal, Henrietta A. Johnson, and the faculty, together with the pupils, developed a library of their own planning which emphasizes the Scandinavian color combination. It is "finished off" with hand-woven window curtains from a design of Scandinavian origin worked out by the home economics department. Each class worked upon these curtains and incorporated its own numerals and insignia in the colorful needlework.

What of the tables and chairs in a children's library? Obviously, chairs and tables should be suited to the size of their occupants and their colors should harmonize with the room. Especially made and colored furniture is still extremely expensive. Sometimes, also, it does not prove satisfactory. The library experimenters, however, need not hang their heads in shame at this fact. Sometimes entire buildings are erected with experimental types of sound insulation, building materials and window adjustments and, inasmuch as standards for these materials have to be changed, it is not surprising that standards for interior decoration must also be changed as experience shows the faults of the original arrangement.

The occasional use of wicker and of tile-top tables is intriguing in a library for young people. Would not a fireplace increase interest in the story hour? Such a children's room appears in the Carmel public library.

Who, also, would not vote for an outdoor court adjoining the children's library? When this court is set with colored chairs, tables and occasional awnings, librarians are convinced that a garden, as well as a house, can well be provided for books. The Santa Barbara public library, with its beautiful patio, is an example of this idea.

The Oakland public schools developed the patio idea in the University High School and Alexander Hamilton Junior High School. Large patios open on two sides of the library, with double doors of glass between library and patio. During the administrations of certain principals, these doors have been kept open and the patios have been frequented by library borrowers.

University High School library is rendered in dark oak and carries the idea of a scriptorium. It is delightful, therefore, to see the wide doors open and the bright dresses of young pupils as they sit in the suddenly sunny doorways or cluster on the steps of the patio.

The Piedmont public schools have availed themselves of the sun and color that have made California famous and have incorporated many ideas of suave beauty in their room planning, which is carried on by the librarian, the art supervisor and the architectural guide.

More and more the school library enthusiasts have come to realize that they must speak for their plan of sweetness and light into the ears that really matter, *i.e.* into the ears of the administrative architect and the building maintenance department, because as school building systems centralize and systematize it becomes necessary for each department to organize itself with the school building as a whole.

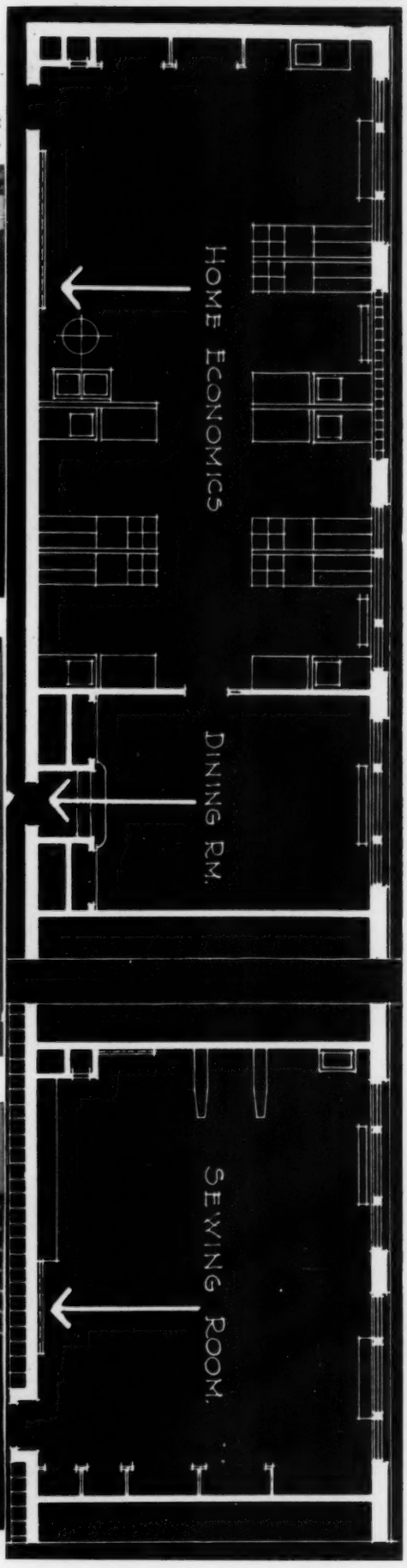
Castlemont High School library, with its beamed ceiling and excellent spacing, is a part of that marked architectural beauty that has created the wide halls, gardens and fine shops in the English tradition.

Any leadership, therefore, that librarians may find through contact with one another's work and through magazine interchanges such as this should be gladly welcomed. However, the suggestions found should lead not to individual and erratic enthusiasm but to specialized and unified efforts toward increased beauty in school building interiors.

Homemaking Suite

AYLIN PIERSON

Architect
Perth Amboy, N. J.



HIGH SCHOOL, SCOTCH PLAINS, N. J.

Lounges for Leisure

HELEN BARKER

Interior Decorator, New York City

TEACHERS need a spot they can call their own, a spot to which they can turn for a few minutes' rest and relaxation during an exhausting day!

With the growing appreciation of the value of beauty in school interiors as an educational function comes also recognition of its importance to the morale of the teaching staff. In its teachers' lounges the school system is extended an opportunity to provide artistic effect at no sacrifice of utility. Modern decoration, institutional or otherwise, is not so much a matter of expense as it is of careful planning and buying. Even the smallest sums will go far if placed in the proper hands.

Comfort Is Primary Aim

First, what is the natural function of this room? The answer is to provide a comfortable homelike spot in which teachers may spend their time when not on duty—to read, examine papers, smoke or rest in quiet.

Before considering a color scheme or making any detailed plans it would be well to view the picture as a whole. To say that it must be practical does not debar it from having simple beauty that will inflict no additional problems upon the maintenance department.

Depending upon its size, the room should contain one or two stiff chairs; a comfortable lounge chair or two with cushions; a sofa or davenport commodious enough to permit anyone to relax completely, and a desk or table. The room should be colorful to supply pleasing contrast from the neutral tones used without. Strong colors are ill-advised because the effect must be appealing to people of varying tastes.

Mildly stimulating colors in cool clear tints of green, yellow or pale rose are desirable as background for the women teachers' lounge. These may be applied to the walls either in paint or in one of the newer varieties of wall coverings, which, by the way, are washable and most durable. They are available in pleasing patterns, self-stripes and textures that may, perhaps, prove a little more costly in the beginning but are economical over a longer period.

If the walls are plain more latitude is provided in the window treatment. The hangings may become the chief decorative note, with bold chintz patterns or harmonious stripes.

We are learning today how ceilings may be brought down to earth by painting them in contrasting colors. The lighter the ceiling the higher it appears. Before applying color too generously, however, the question of lighting must be considered. Darker tones, obviously, will absorb more light.

Good substantial wooden frames are requisites for lounge furniture, as for all interior decoration. There is no secret about the fact that overall upholstered chairs are not as practical as those that have cushioned seats and backs and wooden arms. These are available, too, at no sacrifice of comfort or appearance. It is an added advantage to have the cushions removable so that they can be easily handled when soiled or in need of repair.

Maple or walnut is always popular, although some of the newer bleached woods are now offering close competition. Marked progress has, likewise, been made in recent years in introducing attractive designs in metal furniture, which is cool, clean looking and well adapted to institutional requirements.

In choosing accessories for the women's lounge, thought should be given to their tastes and preferences. The average woman does not become as enthusiastic about a low, deep roomy chair as does a man. More often than not she prefers to sit up straighter. She will, however, enjoy a generous mirror, full-length if possible. Her taste in pictures will be toward water colors or toward the brighter flower prints.

In one respect the woman teacher shares preferences with the men. She wants plenty of good substantial ash receptacles. It will make life less difficult for the maintenance department if these are of the closed type so that when a window is raised ashes will not be strewn over the entire room, a displeasing sight.

In planning a similar room for the use of men teachers, darker, more substantial color schemes are appropriate. Tan or brown as a background with an occasional bright spot of red introduced in the leather cushions of a lounge chair will undoubtedly produce enthusiastic comment. Hangings should be rough-textured, although here discretion must be used because there can be no denying that the smoother the material the more dust repellent it is. Incidentally, all manner of miracles have been performed with modern fabrics in making them dustproof, mothproof and fireproof.

A large flat-topped desk or table will prove a real contribution if space permits, as will generous lounge chairs, the type in which a man can stretch out and relax completely. In fact, a couch is not nearly so essential in a man's scheme of living as are substantial club chairs, particularly those that have ottomans.

Choosing "Masculine" Fabrics

In considering upholstering materials, it would be well to investigate some of the newer leatherized coverings. There is something about them, particularly certain reds and tans, that looks masculine. What man doesn't entertain a longing to have a spacious leather club chair all his own!

Something should be said about lighting. Floor lamps with a three-way switch are most practical. Not only do they provide excellent general illumination through their indirect switch, but they are ideal for reading.

No room can hope to be completely successful if it does not observe its true function. The lounge that is designed for teachers should be restful, harmonious in its general color scheme, interesting in its details and generally inviting. It can be made one of the beauty spots of the school and at no great cost.

Color in the Cafeteria

FRANCES C. FRINK

Director of School Lunchrooms, White Plains, N. Y.

Left: The cafeteria of White Plains Senior High School is made more attractive by the displays of art work contributed by the pupils who are members of the school's art club.

THERE are four cafeterias in the school system of White Plains, N. Y. Each has its own distinct personality but each contributes to the community in such a way as to make the lunchroom department well patronized, almost entirely self-supporting and a decided factor in White Plains' school life.

All four of the lunchrooms have been built or remodeled during the last ten years. It was the desire of the board of education in planning these rooms to make them attractive, to install the latest equipment and to have them efficient to work in and accessible to the children.

Two new buildings were erected during this period: White Plains Senior High School and East View Avenue Junior High School. The senior high school cafeteria is located in a separate wing on the first floor and has a southwest exposure. The East View Avenue School cafeteria is on the fourth floor, which has been given over entirely for this purpose. This delightful lunchroom has outside windows on the south, north and west.

Battle Hill School cafeteria was remodeled from the auditorium-gymnasium in the old section of the building when a new auditorium was built. It is lighted by windows at either end and by four skylights in the ceiling. The cafeteria of Mamaroneck Avenue School was remodeled from two classrooms and a storeroom. It has windows the entire length of the east side of the room.

I mention the exposures in each case because light, air and a certain amount of sunshine are, in my opinion, essential. If a cafeteria possesses these three essential factors, the use of color and equipment is made just that much easier.

We made an effort to work color into the lunchrooms by adding it to the room itself. In schools in which tile has been used, interesting color arrangements have been introduced.

Right: Pupils at Eastview Junior High School who serve behind the counter are dressed in smocks that match the general color scheme of the room. The smocks are designed by the home economics department.

Pupils in the food trades course take a lesson in table service.

For example, the senior high school cafeteria has a 5 foot wainscot of a light cream-yellow tile, with a border of a rosy orange and black tile arranged in triangular shapes that interlock to form a straight band of color.

The teachers' dining room in the same school has a buff tile wainscot with a blue tile trim. The serving room in another cafeteria has delightful buff tile with a plain double band of brown tile around the room at shoulder height; this band is repeated 1 foot from the ceiling. Spaced at various intervals in the upper row of brown tile are scenic tiles representing formal flower and mosaic patterns.

The second spot in which color may be introduced is the floor covering. Let me cite Battle Hill School as an example. The ceilings are high and the room is airy and spacious with the walls tinted gray. The rubber tile floor has a gray tinted background flecked with black, red and shades of gray, outlined with crossing bands of dark red and black. In the high school where much color is evident in the tile, the floor covering is a black and cream diamond checked linoleum.

In these rooms we installed the most modern type of equipment that could be obtained at the time the cafeteria was set up. The tables have 72 by 30 inch steel frames and the wooden tops are inlaid with brown linoleum. The chairs are reenforced bentwood and are sturdy and attractive. In each school are stainless steel and glass show counters with white or cream enamel fronts; these are easily cleaned and are attractive to set up.

We have tried to arrange the counters as efficiently as possible. The latest arrangement is one long hot counter on which the hot food of the day is served and a shorter counter that contains sandwiches, milk, desserts and salads.

It would be impossible to write an article on color and furnishings without speaking of the care of equipment. The floors are brushed daily, washed weekly and waxed periodically throughout the year. Our linoleum top tables are well preserved by being washed daily and covered with a special wax preparation. The waxing is done during vacation periods when the cafeterias are not in use.

Window draperies were originally installed at the senior high school cafeteria for a dual purpose: first, to add to the beauty and homelike atmosphere of the room and, second, to assist in deadening the noise during lunch periods. Since that time the ceiling in each lunchroom has been acoustically treated and the rooms are reasonably quiet.

At present the art and home economics departments in each school are working together on the decoration of the lunchrooms. The art department has recommended certain changes and the pupils are working on wall murals, on color and design for curtains and on other decorative ideas. There is an active art club in the high school and, under the supervision of the art teacher, the members have enhanced the attractiveness of the cafeteria by supplying us with their drawings and paintings, which are placed in well-chosen spaces on the cafeteria walls. It is the aim of the club to provide a new set at least every six weeks.

In the junior high and elementary schools where student help is used behind the counter, pupils are supplied with colorful smocks that fit over their school dresses and give the appearance of a uniform.

The material is purchased by the cafeteria and the smocks are made by the home economics department and are given to the pupil workers who are expected to keep them clean and in order. We have attempted to have these smocks blend into the decoration scheme of the room and add just one more touch of color.

A foods trades class has been established at the senior high school. Here the pupils wear uniforms made by the home economics class in colors that were chosen to blend with the room and still be conservative enough for the pupils to wear if they are sent out on positions. The pupils pay for the materials, but there is no charge for making the uniforms. The style was decided upon by the dressmaking classes under the supervision of our clothing teachers.

In the White Plains school lunchrooms we have attempted to blend light, color, utility and cleanliness into a homelike atmosphere that our young people will enjoy and will come back to every day. At the same time we strive to be an effective educational factor in our schools by being efficiently operated, by serving nutritious food at the lowest possible prices and by maintaining our discipline at a high level.

Educational Lag—Cause and Cure

PAUL R. MORT

Professor of Education, Teachers College, Columbia University

THAT many communities have been slow in adopting improved educational practices is common knowledge. The tendency, however, has been to lay this slowness to local conditions. Perhaps one of the most significant findings of the study reported in "American Schools in Transition"[1] is that the lag is general and that the causes must be sought in conditions that permeate our whole educational system.

This conclusion is forced upon us when we discover that the sampling of 183 adaptations, as given in the "Guide for Self-Appraisal of School Systems,"[2] had reached, on the average, only 30 per cent of a statistical sample of Pennsylvania communities and that only a fourth of them had reached 44 per cent of the communities. Yet these 183 adaptations are not new. By and large they are adaptations on which conservatives and progressives can agree. They have risen from experimentation and scientific discovery largely during the first three decades of this century.

Some of the elements that underlie this lag can be understood when the time chart of diffusion of individual adaptations is observed. A long period elapses between the emergence of a need and its recognition. This is followed by another long period in which various attempts at inventing some way of meeting the need are worked out.

Once a procedure that has survival value has been introduced in a state, it is fifteen years before even the educational leaders have made up their minds about it. It takes that long for 3 per cent of the communities to take it over. After this slow period of experimental introduction, there is a speeding up of diffusion so that 10 per cent of the communities have taken on the adaptation within another six years.

Lack of funds and differences in community culture patterns are the principal factors underlying the slowness with which most communities move in adopting better educational practices

Thereafter, the diffusion goes fairly regularly at the rate of about 1 per cent for three years.

As a rule, in the early experimental period state educational officers are not actively aware of the adaptation, but later they usually play some part in speeding up its diffusion. All in all, however, the period from first introduction to complete diffusion is typically about fifty years.

These facts suggest certain points at which the problem of lag can be attacked from the administration standpoint, but structurally there are other highly significant factors that set the stage for administration.

Of the 67 social, economic and educational factors studied in relation to adaptability, the expenditure level stands the highest. The early introducers and experimenters are usually high expenditure communities, well above the average expenditure level of the United States. At the other end, those that resist diffusion longest are the communities that are poorly financed. There seems to be something of a critical point at approximately the average expenditure level of the United States. Below this level diffusion proceeds most haltingly.

It appears that communities with lower expenditures seldom obtain the professional staff that can interpret the needs to them. In these communities there is less professional awareness of the demands of change. Perhaps it is a lack of original training; perhaps it is a lack of funds to buy books and magazines, to attend the conferences and the summer schools.

Next to expenditure is the community culture pattern. There are various indications from the measures used that what the community expects of the schools has an extremely important effect on what the schools do. If a community supports schools on a high level but expects them to deliver a 1900 education, teachers will provide an education not far this side of 1900. On the other hand, even if the expenditures and other factors make the probability of lively schools small indeed, a high expectancy on the part of the communities will cause the professional staff to rise almost miraculously above its limitations.

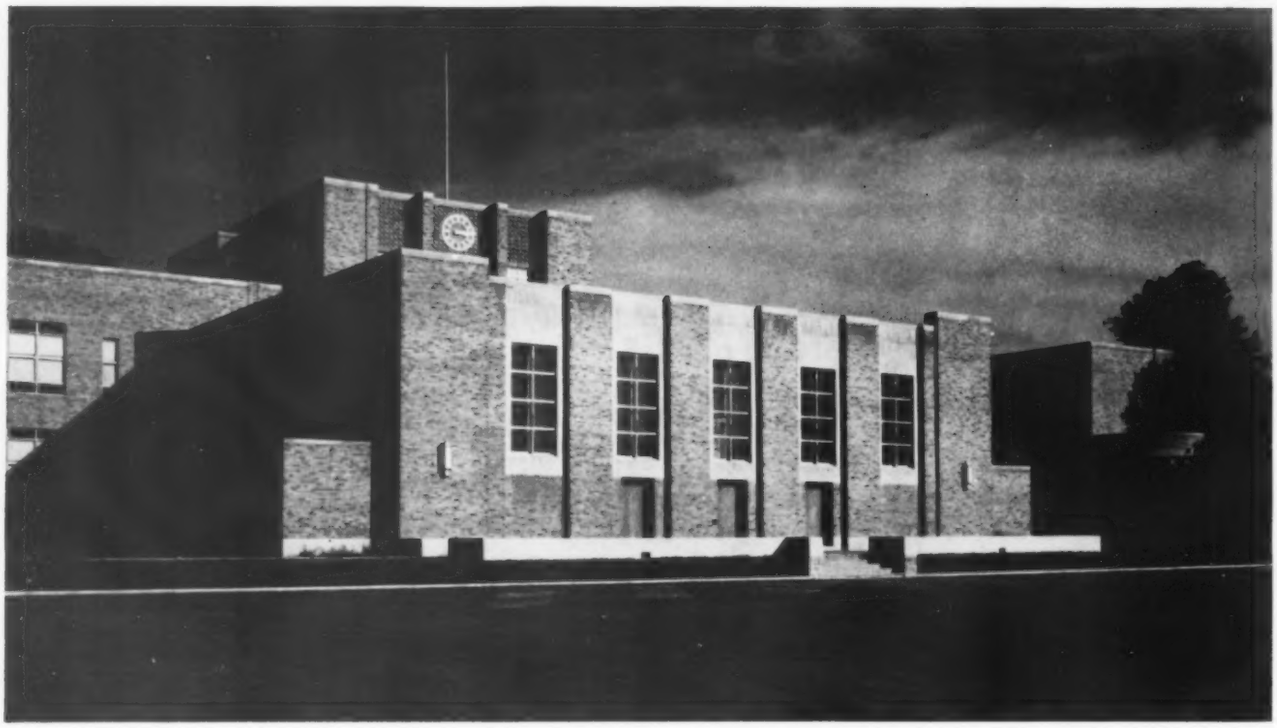
Some of the factors that have been considered highly important in making lively schools do not seem to be as important as we have thought. For example, inbreeding of teachers contributes to lag, but when homegrown teachers have had experience elsewhere, the disadvantages seem to disappear. Furthermore, the age of the staff, within the range studied in Pennsylvania, and the percentage of male teachers seem to have little, if any, effect on the liveliness of schools. Size of school districts is an important factor but it seems to be largely explained by the increased complexity of the population that accompanies it.

If educational lag is to be eliminated, states must have a goodly number of well-supported schools; they must have a minimum expenditure of at least somewhere near the national average and the higher they are above the level the better; they must have school districts that provide a complex population. Within such a setting administration has a tremendous part to play.

The level of financial support, the school district and the population composition are but the soil. Good soil well cultivated yields unusual crops; poor soil well cultivated yields more than its expectancy. Operationally, the school superintendent holds the most strategic position by great odds.

[1] Mort, Paul R., and Cornell, Francis G.: American Schools in Transition, Bureau of Publications, Teachers College, Columbia University, New York, 1941.

[2] Mort, Paul R., and Cornell, Francis G.: A Guide for Self-Appraisal of School Systems, Bureau of Publications, Teachers College, Columbia University, New York, 1939.



OUTLINE OF CONSTRUCTION DETAILS

CONSTRUCTION: Modified modern architecture. Completely fireproof steel and reenforced concrete plank floor and roof construction. Roofs, insulated. Exterior, random colored face brick (light salmon to russet brown); limestone and granite trim. Stairways, steel and concrete. Stair and vestibule windows, insulated glass block. Sash and exterior doors and frames, aluminum. Interior doors, flush wood.

FLOORING: Classrooms and corridors, mastic tile; gymnasium and shop, edge grain wood blocks; kindergarten, ornamental linoleum; library, cork tile; toilet and shower rooms, vitreous tile.

WALLS: Acoustically treated plaster and tile.

CEILINGS: Acoustically treated plaster and tile.

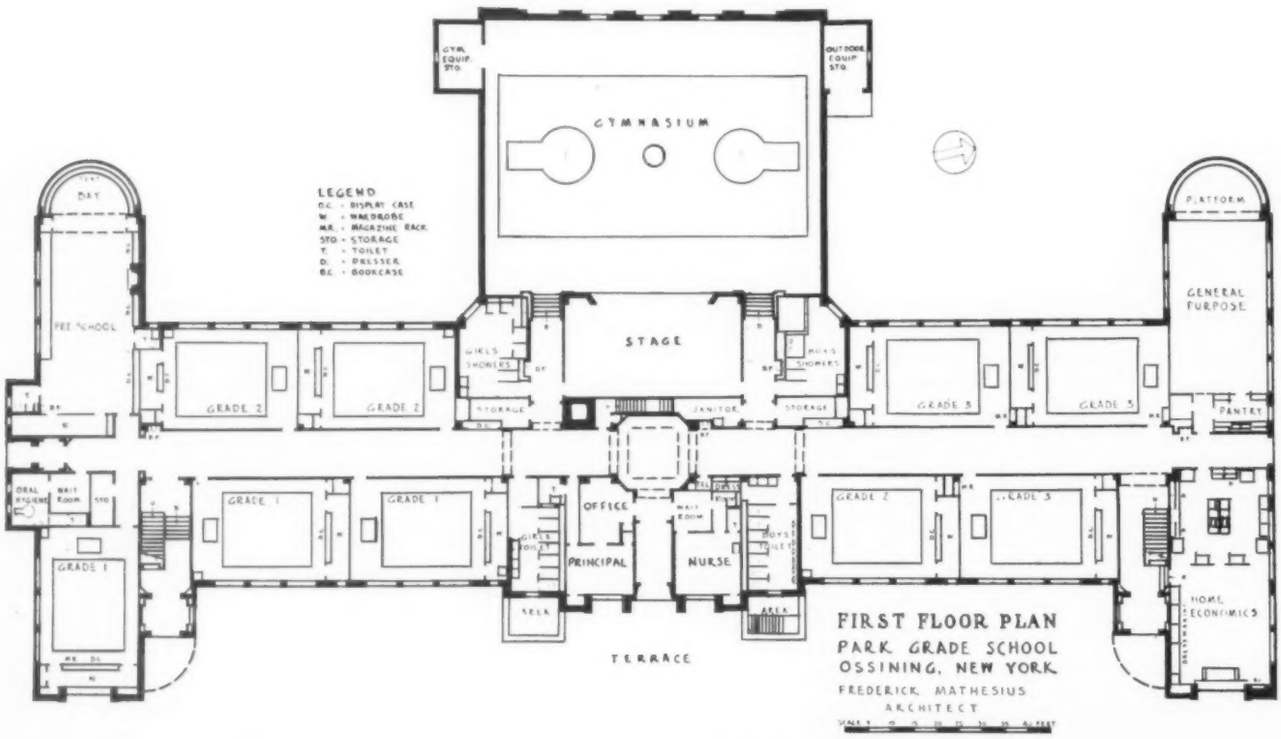
WAINSCOTS: Corridors, shower and drying rooms, architectural terra cotta blocks; toilets, colored ceramic tile; gymnasium, cork tile.

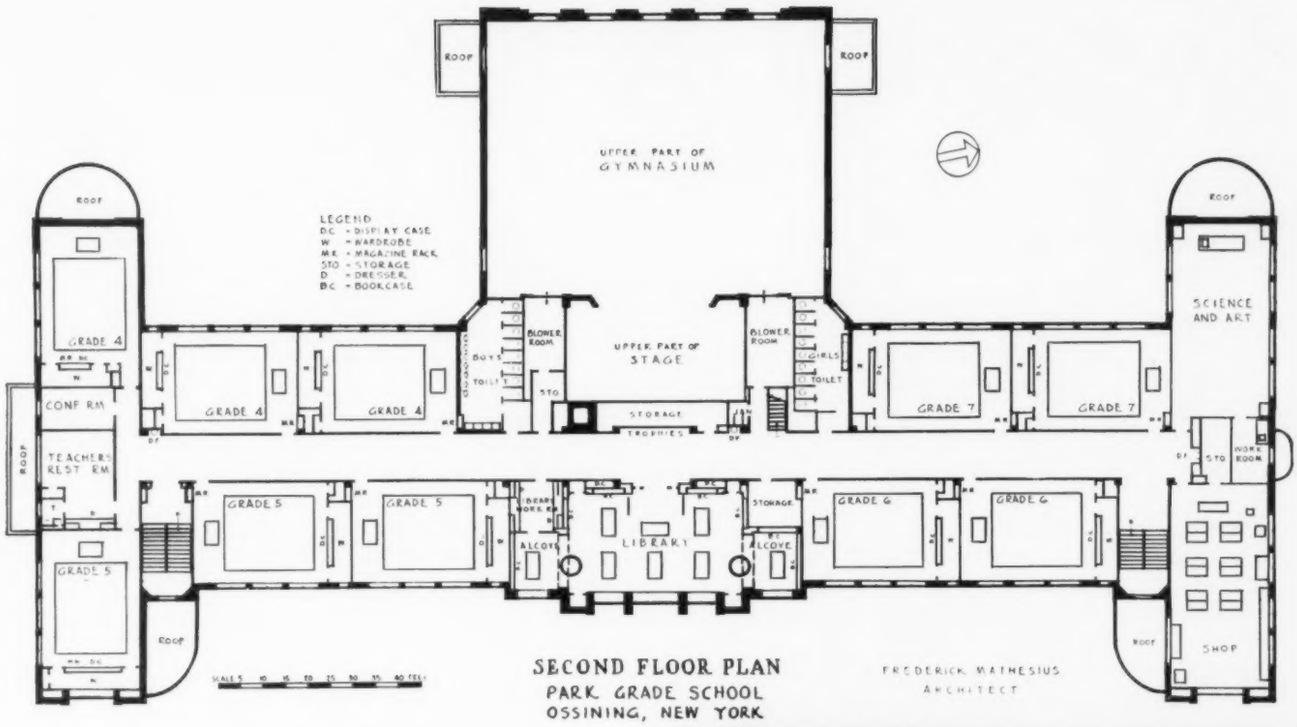
HAROLD V. LOOMIS, Superintendent
FREDERICK MATHESIUS, Architect

LIGHTING: Electric units recessed in ceilings, with prismatic lenses for scientific light diffusion.

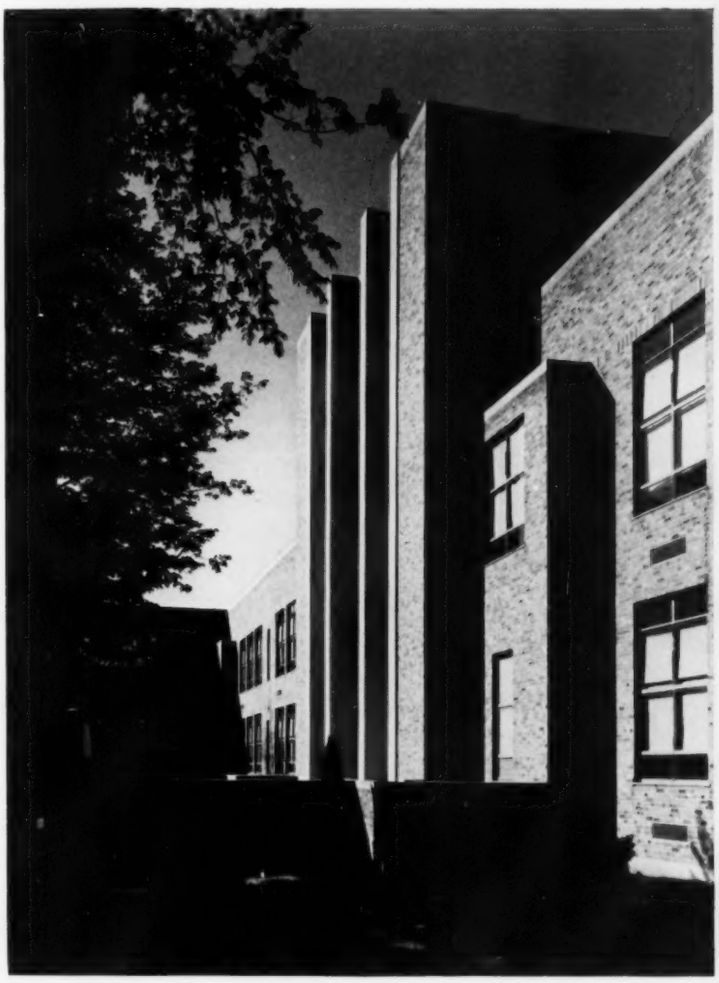
HEATING: Three steel fire-tube boilers with automatic oil burners. Automatically controlled direct and unit-ventilating radiation in all rooms.

COSTS: Total, $398,278 divided as follows: building, $325,333; equipment, $42,238; grounds, $30,707. Volume, 823,500 cu. ft. Cost per cu. ft., 39½ cents.





PARK SCHOOL
OSSINING, N.Y.



Left: Pupils at work in the up-to-date domestic science room. The school has 21 classrooms and houses 1085 pupils. Other special rooms include science and preparation rooms; a shop; a library; a conference room; the nurse's office, and a combined gymnasium and auditorium.

Designed for the Trades

SAMUEL D. JONES

**Business Manager, Board of Education
Louisville, Ky.**

THE Theodore Ahrens Trade High School, Louisville, Ky., is of modern commercial design, indicative both of the industrial type of work and of the educational activities of the school. It consists of ground floor, first floor and second floor, the ground floor being slightly under sidewalk level.

The addition just completed, erected at a cost of $354,500, consists of a three story reenforced concrete building, strictly fireproof, with a frontage of 170 feet and extending back 180 feet to an alley. This addition follows the same architectural design as the original building, which was erected in 1925, making the two parts appear as one large building.

The exterior walls are faced with a variegated amber colored salt glazed brick, with Indiana limestone trim. In the light court a white enameled face brick was used in order to reflect more light. Steel sash of the heaviest sections, galvanized and treated to resist rusting, is used throughout. The roof is twenty year bonded tar and gravel. All ceiling heights are 12 feet, except the electric shop, which has an average ceiling height of 15½ feet.

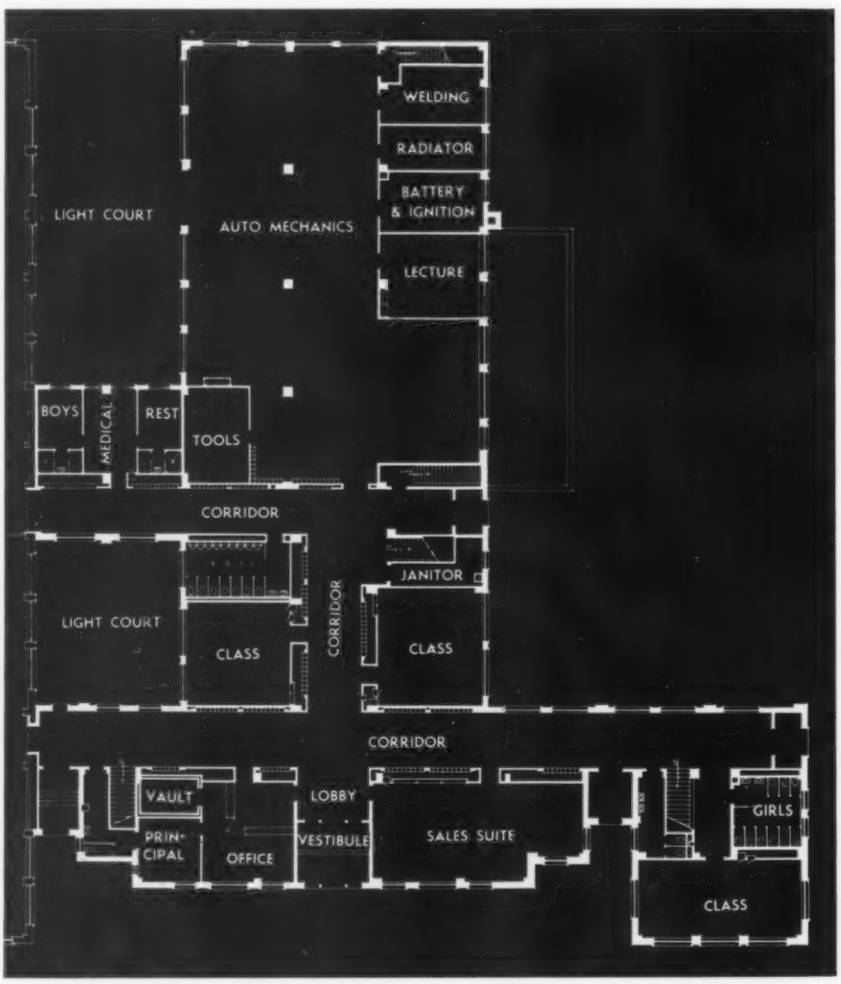
The administration offices, consisting of a general office, principal's office and record vault, are located on the first floor to the left of the main entrance. The sales suite, a drawing room, two classrooms and medical suite are also located on this floor. The medical suite has, in addition to the medical room, a boys' rest room and girls' rest room, each with its own adjoining shower and toilet.

To the rear on the first floor, with access to the alley through a large steel accordion door, is the automotive shop, 42 feet wide and 97 feet long. Adjoining the main shop are auxiliary rooms for lectures, welding, battery and radiator repairs and tool storage. This shop has a cement floor treated to give a dense long wearing surface. It is equipped with three exhaust fans located at the floor to take off any carbon monoxide fumes that may be generated. Three cast iron exhaust pipes are run to atmosphere for exhaust connection from permanent engines. The latest type of equipment has been installed, providing facilities for all types of automotive work.

The second floor houses the library, with a stack room on one end and a workroom on the other, a drawing room, six classrooms, two large sewing rooms with fitting rooms adjoining and a storage room. The library, stack room and workroom have marbleized green linoleum floors, plaster walls lined with built-in book shelves 7 feet high and an acoustical tile ceiling.

The third floor consists of a commercial arts department, drawing room, science room, four classrooms and an electrical group. In addition to the large electrical shop, 65 feet wide and 76 feet long, this group contains a motor room and a soundproof radio room. One side of the electric shop is fitted with a double tier of booths to be used for house wiring practice. The installation of electric laboratory panels provides complete equipment for instruction in this field.

All classrooms, lecture rooms, sewing rooms, drawing rooms and commercial art rooms have maple floors, plaster walls and ceilings, with oak trim and are fitted with slate blackboards and cork bulletin boards. Each room is equipped with a built-in book case and teacher's wardrobe. The sales suite and science room have built-in cabinets for supplies.

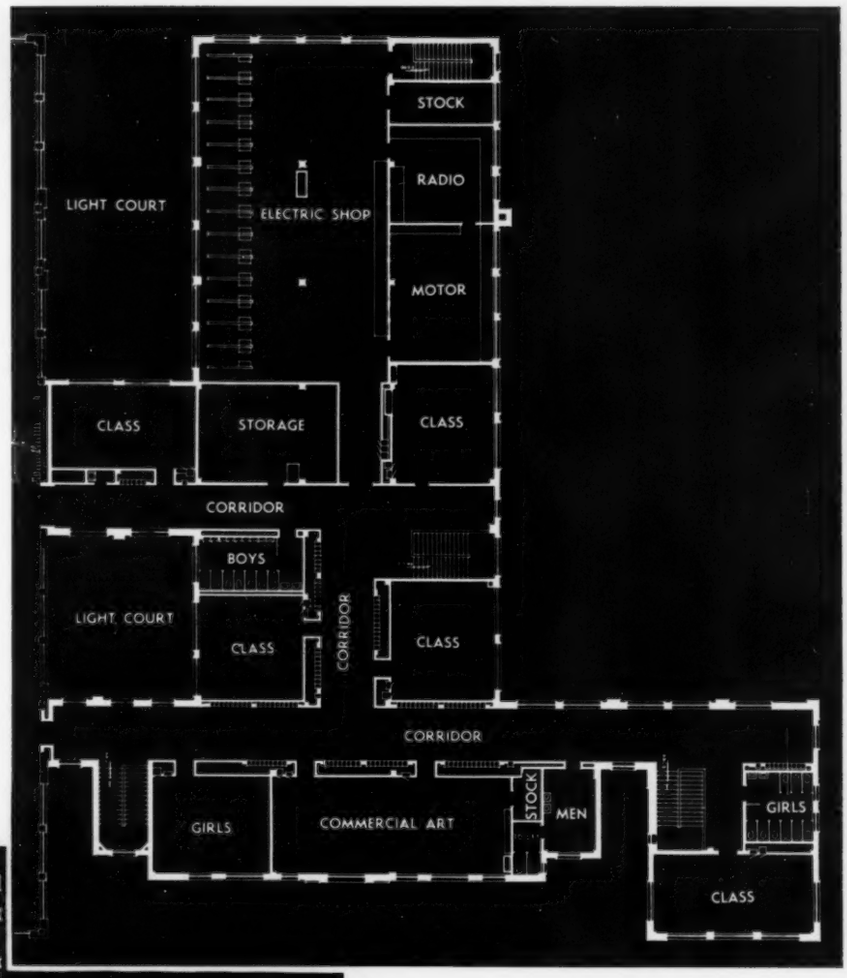


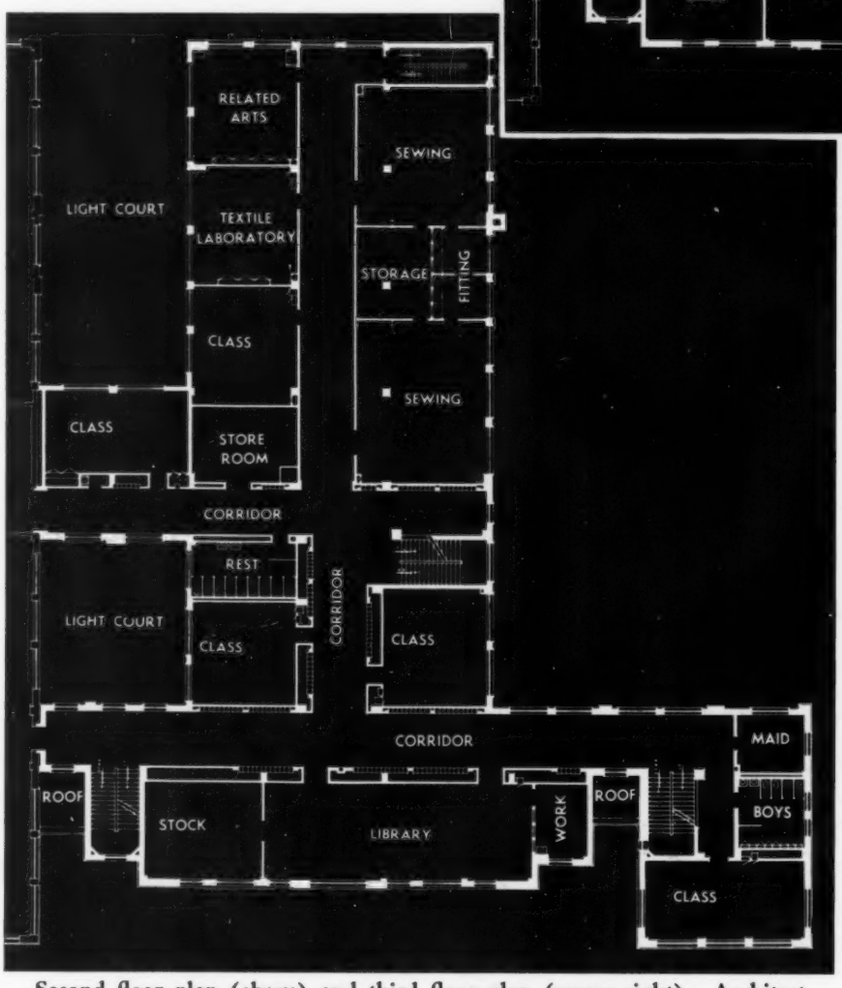
First floor plan of the new addition to Theodore Ahrens Trade High School, Louisville, Ky. It has a frontage of 170 feet and extends back 180 feet.

The shops are large and well lighted; they have cream colored semiglazed tile walls and painted concrete ceilings and are fitted with work benches, cabinets and cases for the storage of equipment and supplies. Corridors have terrazzo floors, amber colored salt glazed brick wainscot 5 feet high, plaster walls and acoustical tile ceilings. All pupil lockers are steel and are recessed into the corridor walls.

The toilet rooms provide adequate facilities and are designed for sanitation and easy cleaning, having terrazzo floors, glazed brick wainscot 5 feet high with cove base, plastered walls and ceilings. The slate stall partitions are fitted with chromium plated fittings and all supply and waste pipes are concealed.

The boiler room contains a new heating plant, designed to heat both new and old buildings, with additional space for future expansion. Steam is supplied from three welded steel boilers with long water legs; they are equipped with stokers. The steam pressure may be varied from below atmosphere to 10 pounds' pressure, depending upon the weather.





Second floor plan (above) and third floor plan (upper right). Architect Alfred Weinedel followed the original architecture in designing the addition.

Classrooms and shops are provided with direct radiation and unit ventilators, which supply from 6 to 8 complete air changes per hour from the outside. All rooms are thermostatically controlled by the pneumatic system. The vents from the rooms go to the roof and are pneumatically controlled so that they are closed when the air is cut off.

The electric system is designed to give the best possible artificial lighting when and where required. Since electrical instruction is offered in this school, capacity for lighting and power has been provided so that the pupils may at will make any changes in the wiring system. In the north wing a photo-electric cell is installed to control the lights so that they come on automatically at any predetermined foot-candle setting. Telephones and clocks are installed in each room, with a program system in the halls. Conduit and wires are provided for a public address system to each classroom and shop.

Chalk Dust

THE master clock is striking four for Alice Porter at Houlton, Me., and Blanche Croom at Fort Smith, Ark. The school day is over for Mary Howe in New Orleans and George Scholl in Seattle. It is quitting time for these four great teachers and for a goodly company of their colleagues from the Atlantic to the Pacific. They are retiring from teaching come June.

Their work-a-day routines are through. The last problem has been taught. The final scrawly paper has been corrected. The kids are dismissed.

The clock points to four, and for these friends of ours the long sunny afternoon stretches ahead before the evening shadows fall. The woods and the brooks are calling. The friendships they have wished to cultivate, the books they have longed to read, the good talk in which they would participate are satisfactions now to be fulfilled by those who have had to forego much in a busy life of routine and work.

It is four o'clock and the best hours of the day are yet to come. These are hours of relaxation and rest and fun and social pleasures, a pleasant afternoon hour of calm and refreshment, a little space before dinner when the folks gather to marvel at the colors that fill the evening sky.

"Retire" we call it in the paucity of our language! But Alice Porter and Blanche Croom and Mary Howe and George Scholl can never retire. They continue as part of the continuing life of a busy world. The work they initiated is a vital living task that goes forward; the dreams they dreamed come ever nearer reality; the plans they made are perfected and strengthened; the influence they exerted lives on and on.

• •

THEY ALSO SERVE

The patience of Job was a wonderful thing
Enduring through trouble and strife,
But a greater and grander forbearance I sing—
The plight of a schoolmaster's wife.

For she watches in vain at the close of the day
While the supper shows signs of the blight;
The phone rings: "I'm caught by the darned P.-T.A.!"
Or "The board, dear, is meeting tonight!"
Does she hope to step out for some bridge or a show
Like more commonplace mortals may do?
Some mamma or auntie gets Hubby in tow
And it's midnight before he is through.

Can she ever consider the club or a dance
Or some fun that is more orthodox?
Alas, she must press the professional pants
Or mend the executive socks.

She waits in the office, she waits in the halls,
She waits amid quiet or din,
She waits on the steps till the janitor bawls,
"Mrs. Whoosis has got 'im agin."

Give honor, Professor, to those who deserve,
And with gratitude deep contemplate:
'Tis written in gold that they also serve
Who only stand steadfast—and wait.

• •

WHAT IS THIS PUBLIC SCHOOL? It is the tiny weather-stained shelter standing at the crossroads of the little hamlet in the valley. It is the imposing building on the hill to which children go joyously. It is one of the four corners on the public square, sharing a place with the church, the courthouse and the fire hall. It is the dingy brick structure beside a dirt-hardened playground that breaks the long monotonous rows of tenement houses. It is the gracious edifice surrounded by carefully kept lawns and parks and pleasant vistas.

WHAT IS THIS PUBLIC SCHOOL? It is the youngster on the farm whose days of drudgery are brightened by new skills and knowledge. It is the dead-end kid hemmed in by city streets finding a welcoming place to work and play. It is the son of the foreign-born who sees a vision of freedom denied his father. It is the daughter of the rich and the daughter of the poor learning mutual respect and friendship.

WHAT IS THIS PUBLIC SCHOOL? It is the Stars and Stripes floating in the breeze. It is a symbol of the dreams of a free people. It is the desire for justice, the hope of a life that man may live without fear. It is democracy victorious over dictatorship. It is America, triumphant and strong and free.

It is yours and mine, a heritage to be passed on unimpaired to our children's children.

Pupil-Personnel Work

I—Definition of Its Functions

ARCH O. HECK

Professor of Education, Ohio State University

THERE is a misconception in the minds of many persons regarding what is meant by pupil-personnel work. Too frequently, it is thought of only as the activities of the technicians responsible for studying and advising pupils in regard to vocational, health, moral, social, educational and personal problems. These technicians are the full-time pupil-personnel workers.

It is important that we recognize, however, that pupil-personnel work may and should be performed by teachers, principals and superintendents. An important function of any classroom teacher should be that of studying, advising and counseling with pupils regarding their numerous personal and social problems.

Teachers Need Understanding

It is doubtful whether any teacher who has no understanding of the stresses and strains that stimulate and restrain the activities of a given child; who has no knowledge of the aptitudes and abilities of her pupils, and who has no means of knowing how and why her pupils think as they do can teach effectively.

When a teacher attempts to acquire a greater understanding of her pupils and when, having acquired it, she counsels with them in an effort to solve the problems that face them at the moment, she is performing effective pupil-personnel work. In fact, any teacher worthy of the name will always so function in her personal dealings with pupils; modern education demands just such an understanding of children. In this respect the good teachers of generations gone by were excellent pupil-personnel workers.

I well recall days spent in a one room rural school. I attended such a school during the first two and last four years of the elementary grades. During the last four years, I had a teacher who took a great interest in his pupils. There were not many of us. The enrollment varied during this period from 8 to 15. This teacher knew his pupils; he played with them; he visited in their homes; he attended the local church, and he had many personal talks with the small number of seventh and eighth grade pupils.

Through these varied contacts, this teacher knew his pupils as well as, if not better than, most parents know their children. As I have reviewed those school experiences in recent years, I realize that he had each of us judged fairly accurately. He knew the way we were treated at home; he knew the play activities in which we were most interested; he knew how well we got along with our brothers, our sisters and our playmates; he knew who were good sports and who were quitters; he knew something about our physical capacities and stamina; he knew our academic abilities; he knew about some of our aims and ambitions; he even knew of our love affairs.

Many a morning I was ten or fifteen minutes earlier than other pupils in order to talk to the teacher. He always had time for us; he listened; he questioned in a way that opened up new possibilities to us.

Old Order Has Changed

In many school systems, however, the old order has changed. Teachers rarely have intimate firsthand contact with their pupils. School enrollments have increased so that the teacher-pupil load is extremely heavy. Specialization has swept our school systems and in many places it is only in the primary grades that a pupil remains with one teacher throughout the day. Even in these grades the teacher often has the pupil for one semester only.

Recently I visited a city high school during National Education Week when the school was putting on an evening demonstration. Previous to the demonstration, open house was held and parents could visit the teachers in their homerooms. One teacher remarked that he was frequently embarrassed by being unable to recall a given pupil even after the parents of the pupil had introduced themselves. He could recall the name as a name listed in his class book but he could not connect the pupil's face with that name; it was just a name.

This situation presents vividly the present day teacher's problem. He often teaches one subject only; he has six or more groups of from 25 to 35 pupils each; this means anywhere from 150 to 210 pupils. Is it any wonder that he is often unable to connect a pupil's name with the right face?

No Time for Contacts

We realize today that teachers cannot have sufficient home contacts with their pupils; time is not available. We realize that they cannot have many school contacts; certainly not enough to aid them in knowing and understanding those pupils sufficiently to give intelligent advice. This lack of time on the part of teachers to get acquainted with all the pupils they teach is one reason why specialized pupil-personnel services have gradually been developed.

During the last four decades many technical instruments have been devised for use in the study of pupils. These include standardized measures of mental ability, aptitudes and scholastic ability; devices for determining interests and attitudes; methods of obtaining more data about the physical well-being of pupils, and plans for getting technical information about trades, occupations and professions. The art of getting a better understanding of what lies back of the emotional problems of children has been greatly developed.

These varied activities are definitely technical in nature. The average teacher is as much a layman in dealing with these problems as is the parent in dealing with the problems of teaching history or mathematics.

This does not mean that the teacher should cease to perform that important guidance function that he

performed so ably in the one room schoolhouse. It does mean, however, that this guidance activity cannot be spread thinly over the 150 or more pupils he has in his various classes; besides, other teachers have the same pupils. It means that the modern school must be differently organized for counseling purposes.

Some plan for making the teacher responsible for counseling with 25 or 35 pupils only is necessary. His relationship with this group should be fairly permanent, and he will need all the assistance that the various technically trained pupil-personnel workers can provide him concerning each pupil in his counseling group.

Thus, the field worker (the attendance worker, visiting teacher or psychiatric social worker) will provide and help the teacher interpret data about the child's out-of-school relationships; the health worker will assist the teacher in interpreting facts concerning the pupil's body; the psychologist will study the pupil's mental abilities, aptitudes, scholastic abilities, attitudes and interests. The counselor, among many other duties, will provide data on vocations; the psychiatrist will help the teacher in understanding the basis of the emotional upsets that are so destructive of good school work, and the child accountant will assist in keeping a complete and understandable record of all pupils.

The teacher occasionally finds a pupil whom she cannot help. The problem may be one of refusing to attend school, inability to get along with his fellows, extreme bashfulness, timidity or inability to adjust his ambitions to his obvious limitations. When the teacher finds he is stymied, he seeks the direct assistance of some one of the pupil-personnel agencies. These suggestions assume always that the school system has adopted some systematic plan of having counseling reach all pupils through the regular teaching staff.

Finally, the pupil-personnel worker performs another function: he assists teachers to recognize pupil problems more quickly and thus to prevent many maladjustments. The modern attendance worker discusses with teachers causes of nonattendance and truancy so that symptoms of oncoming truancy can be recognized. Visiting teachers or psychiatric social workers point out pupils who need help in solving problems which, if ignored, may lead to serious consequences. Psychologists instruct teachers in the best use of test results; they even aid them in using group tests in an effort to know pupils better. The school physician and the school nurse help the teacher check many details about the child's physical condition that might otherwise go unnoticed until too late. This instruction may be largely informal but it should be general and continuous.

The definition of pupil-personnel work should, perhaps, be given more formal consideration at this point. I propose for purposes of discussion the following definition: Pupil-personnel services are those activities, outside of actual instructional activities, that aim at putting all children of school age in the physical, mental, social and emotional condition that is most favorable to the most wholesome type of instruction. This definition is given merely for the sake of stimulating discussion. A better statement can undoubtedly be developed.

To be sure many individuals, outside the school organization as well as within it, will have responsibilities for doing pupil-personnel work as thus defined. Parents, pastors and social workers perform such services outside the schools; school superintendents, janitors, principals and teachers perform them within the schools, in addition to their other duties.

Pupil-personnel workers, however, are those whose major, if not sole, responsibilities are covered by this definition. Thus, attendance workers, visiting teachers, child accountants, counselors, health workers, placement workers, psychologists, psychiatrists, psychiatric social workers and special educationalists can be listed as pupil-personnel workers.

Finance Plan for Oklahoma

N. CONGER

Dean, School of Education
Oklahoma Agricultural and Mechanical College

IN FEBRUARY 1940, a joint committee was appointed by Governor Leon C. Phillips and the president of the Oklahoma Education Association consisting of 10 members under the chairmanship of Dr. John F. Bender, professor of school administration, Oklahoma University, to study the problem of financing education in Oklahoma. The report of this committee, written by Doctor Bender, has recently been published.*

In the report the situation in Oklahoma is analyzed in extensive detail under the following headings: education as a function of government; problems of ability, effort and population; the inadequacy of the present program of common school education in Oklahoma; state aid and its application to the schools of Oklahoma; problems of law and legislation affecting schools, and the costs of schools, of other functions of government and of other services. The ability of the state of Oklahoma to finance its schools in comparison with other states, the per capita wealth per pupil and the state's effort in financing its program in comparison with other states are set forth in carefully related data.

The inadequacy of the present state program is shown by tables comparing costs, enrollment, teacher load, teacher salaries, teacher preparation and per capita outlay per pupil with similar items in selected states and in the United States. The problem of state aid, its necessity and abuses are presented through comparative tables of pertinent data. In fact, the picture of the school situation in the state is as completely presented as it could well be in a report of this kind.

There is always a temptation in such a study to gather the facts and to say to the reader, in effect: "These are the facts, what are you going to do with them?" Doctor Bender and his committee did not yield to this temptation; instead, they made specific recommendations for the guidance of the legislature. It is a report that anyone can read with profit.

*Bender, John F., and Others: Problems in Financing the Common Schools of Oklahoma. Oklahoma City, Okla.: Bond Printing Company, 1941. $3 (cloth), $2 (paper).

. . . "Keeps the Doctor away

The apple is, indeed, a versatile miracle worker, if there's any truth in old sayings.

Air, too, when properly heated and adequately circulated, is a miracle worker in its own right, so designated by modern medical science. And the rightful recognition of proper heating and ventilating as a safeguard for health, though late in coming, today is almost universal.

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Has Health Education Helped?

RUTH E. BOYNTON, M.D.

Director, Students' Health Service, University of Minnesota

IN 1917 and 1918 the United States Army rejected as physically unfit approximately 30 per cent of the young men who were drafted for military service. The question that many ask today is: Are the young men who are being drafted now any healthier than those of 22 years ago?

The answer to this question can only be given with certainty when the physical findings on the thousands of young men being inducted into military service today can be compared with those of the young men of the World War.

The large number of young men found to have preventable physical defects in 1917 and 1918 gave great impetus to preventive medicine and public health work, particularly in our schools. Programs of health education, medical supervision of school children, school nursing service and physical education have developed more rapidly during the last twenty years than during any previous time. The extension of these health services was made because school authorities and physicians believed that if there were some provision for the early detection of preventable and correctable physical defects it would be possible to prevent many of the disabling handicaps that were found among the young men drafted in the first war.

Opportunity to Check Program

The physical examination of several million young men under the Selective Service Act offers an unusual opportunity to evaluate the effectiveness of our health education program. Incomplete and scattered data available at the present time indicate that the percentage rejected for physical defects in 1941 is approximately the same as in 1917 and 1918. There are those who think that, although the percentage rejected may be no lower, the type of impairments that have caused the rejections will be found to be less serious among the young men of today than among those of 1917.

It must be kept in mind that the physical standards for rejection in 1940-41 are not the same as those used in 1917-18. In many respects the 1940 physical examination or, rather, the required physical fitness for admission to the Army is higher than that set in 1917. Mere figures of the percentage rejected in each group, therefore, probably are not an accurate comparison of the physical fitness of the two groups of young men. With the progress that has been made in the control of tuberculosis, syphilis, rheumatic heart disease and other disabling diseases, it would be strange if this progress were not reflected in the physical condition of the young men of today.

Some indication of this improved physical fitness is shown by the physical examination records of college students. While it is recognized that there are certain definite factors of selection in the college population, the college group in a large state university represents a fairly good cross-section of the communities from which the students come. An unselected sample of the physical examination records of young men entering the University of Minnesota in the fall of 1939 was studied and the findings on physical examinations at the university were compared with the physical standards of the Selective Service Act insofar as it was possible to do so.

According to the physical standards under the Selective Service Act the examinees are being classified into three groups: class 1A, those physically qualified for general, active military service; class IB, those who are physically unfit for general, active military service but are fit for special and limited military service; Class 4, those who are physically unfit for any military service. In brief, the regulations say: "The registrant must be able to see well; have comparatively good hearing; have a heart able to withstand the stress of physical exertion; be intelligent enough to understand and execute military maneuvers, obey commands and protect himself, and be able to transport himself by walking as the exigencies of military life may demand. Examining physicians will accordingly so construe these standards that the objectives stated may be realized."

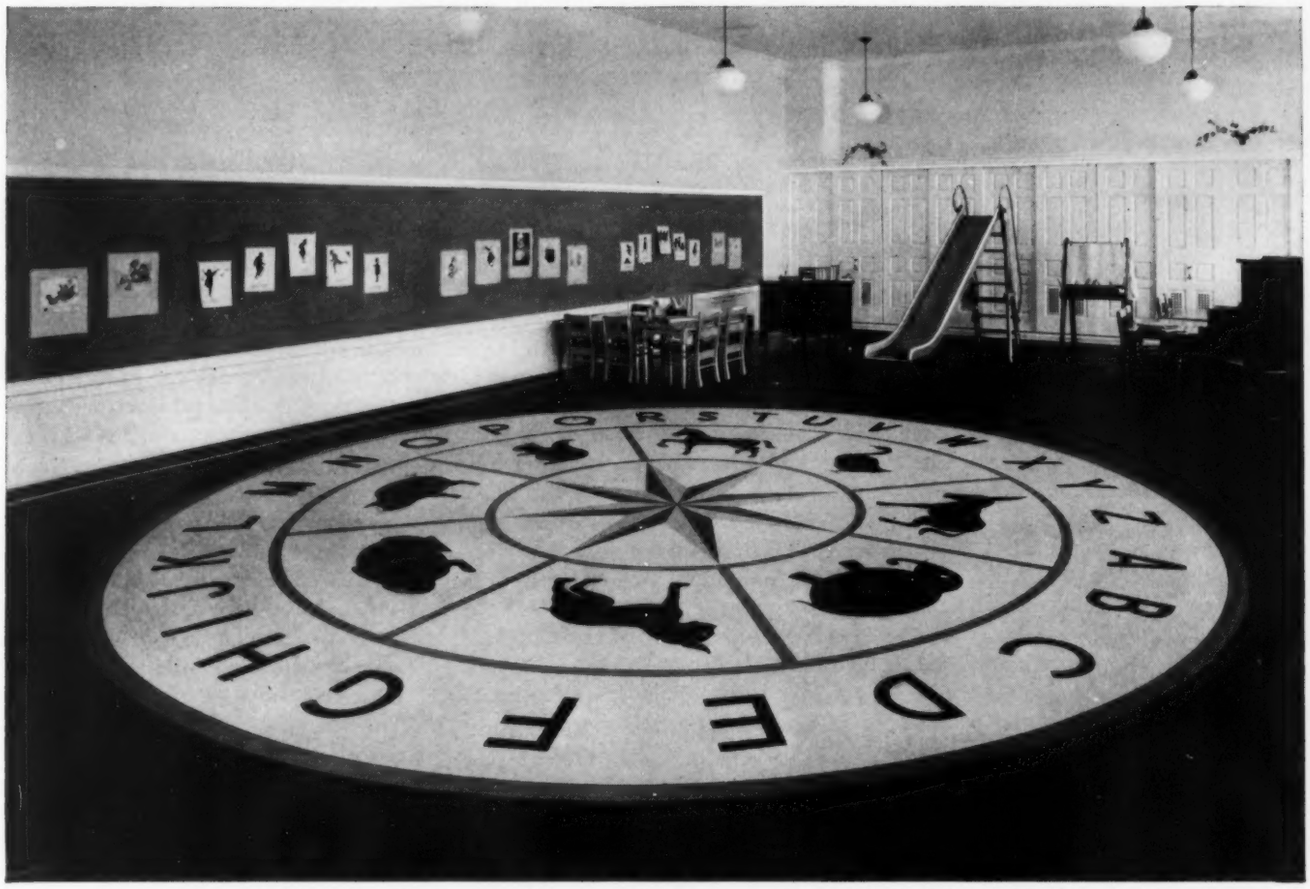
In the sample of 1000 young men entering the University of Minnesota in the fall of 1939 there were 186, or 18.6 per cent of the total, who would be rejected for military service at the present time. This total includes both those who would be classified for limited military service and those who are physically unfit for any service. This figure of 18.6 per cent is considerably below that reported in the preliminary reports of volunteers and early draftees.

Disabilities Classified

The reasons for the disabilities in this group of college men bear out the predictions that have been made in that the majority were rejected for minor physical disabilities. Ninety-four, or 9.4 per cent, of the 1000 students would be assigned to class 1B—those physically unfit for general, active military service but fit for special and limited military service. In this group the following were the most common reasons for such classification: nose and throat defects, 4.4 per cent; defective hearing, 1.4 per cent; asthma, 1.1 per cent; hernia, 0.8 per cent; stuttering, 1.2 per cent, and visual defects, 0.1 per cent.

It is evident that the type of physical defects found in this group of university students is in most instances correctable and preventable; only a few were of such character and severity as to make the individual permanently unfit for duty.

There were 92, or 9.2 per cent, who would be assigned to class 4, *i.e.* physically unfit for any military service. The most frequent physical defects responsible for so classifying these young men are as follows: underweight, 5.0 per cent; persistent rapid heart, 2.8 per cent; visual defects, 0.3 per cent; tuberculosis, 0.2



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FLOORS AND WALLS

per cent; diabetes, 0.2 per cent; duodenal ulcer, 0.1 per cent; syphilis, 0.1 per cent; flat feet, 0.5 per cent.

Some of the young men included in this sampling were under 21 years of age. It is probable that a number of those who were put into the rejected class because of being underweight would have been acceptable had they been 21 years of age, inasmuch as studies have shown that college men increase in weight with age and that the percentage of underweight students decreases as the age of the student rises. It is also probable that some of this group of underweight students would have been accepted for military service if, in the opinion of the examining board, the individual would be expected to gain weight with proper food and training.

It should be pointed out that in this group of 1000 students there is not one who would have been rejected for active military service because of dental defects and only one student who would have been classified as 1B, for limited military service, because of his teeth. This is in marked contrast to the early figures reported on groups of volunteers and men drafted under the Selective Service Act in whom it was found that from 17 to 24 per cent of those who were found unfit for active service were rejected because of dental defects. There seems to be no question about the fact that college students are much better in this respect than the average group of draftees.

The findings in this comparatively small group of university students indicate that college students are probably in better physical condition than a true sampling of the general population of the same age. Whether this is the effect of intelligence on the health habits and health practices of this group of college students or of the health education to which they have been subjected throughout their school years or to the social and economic factors that permit this group to obtain better medical and dental care can only be surmised.

When the complete results of the examinations of thousands of young men from all sections of the country and from all social, economic, occupational and intellectual levels are available many of these questions can be answered.

Centralize Selection of Personnel

HARRY K. YOUNG

Assistant Vice Principal, Polytechnic High School, Riverside, Calif.

TOO many school administrators today are delegating the responsibility for noncertificated personnel selection and control to too many people.

In California, for example, there is absolutely no agreement among school administrators as to who shall be responsible for the selection and control of noncertificated employes. In the 25 largest school systems of the state there are almost 25 different ways of assigning this responsibility.

There are apparently two reasons for the numerous personnel policies existent.

First, little thought has been given to the problem or to the need for constant change. For example, in only a few of the largest school systems has thought been given to the need for civil service procedures for selecting and supervising the noncertificated personnel. Yet, civil service as a trend in public personnel administration has been of tremendous significance during the past few years. In fact, a bill was recently introduced in the California state legislature requiring school systems to select and supervise all noncertificated employes by means of civil service procedures. The bill failed to pass but it will be reintroduced.

Second, and concomitant with the first, school systems, generally, have grown so gradually that administrators have not been aware of the need for improved personnel policies. Except in a few unrelated instances sweeping changes have never been made. School labor policies have not changed with the changing times.

What would constitute a logical and workable method of delegating the responsibility for the selection and control of the nonprofessional school employes? The size of the system will determine to a large extent the amount of delegation of responsibility that needs to be made. There are, however, several factors that must be considered aside from the size of the system if the personnel policy is to be successful.

1. Selection and ultimate control must be centralized. To allow every principal, every building superintendent or every head gardener to select and supervise his own workers will certainly confuse matters.

The arguments for a centralized labor selection agency are numerous. It will provide the employer with a larger number of candidates from which to choose. It will give the unemployed a centralized place in which to seek employment. It will facilitate the adoption and use of standardized selection methods, such as tests. It will help the employer to establish standards for age, education, experience and any other qualification he may find desirable.

Aside from being the most practical method of labor selection, a centralized agency is of the most advantage politically. To force job seekers to curry the favor of every principal or every head custodian to gain employment will inevitably create in the public mind the impression that schools are run on the spoils system.

2. Labor policies must emanate from a central agency. The logic of this statement becomes apparent when one studies the labor policies of a number of school systems.

3. A centralized personnel agency will make possible an experienced personnel director.

School administrators sometimes lose sight of the fact that they are fairly large employers of labor. Industrial concerns of the same size must constantly study and change their personnel policies. Retirement, unemployment insurance, unionization and other phases of labor administration are all factors that must be taken into consideration. School administrators are concerned with education rather than with the problems of labor and because of this they need someone to whom they can delegate this responsibility.

Finally, it must be agreed that the public wants the most efficient school administration possible. Every step toward having the school run as an efficient business will be lauded by the public and will, in the long run, build up a better spirit between the school system and the public.

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Readings in Adult Education

WILBUR C. HALLENBECK and WILLIAM J. PITT

Associate Professor of Education and Assistant in Adult Education, Respectively, Teachers College, Columbia University

How can we stop losing so many students in the evening schools?

What kind of a study program should the P.-T.A. have?

How can the high school cooperate in the national defense program?

Will you help plan a community program of adult education?

QUESTIONS like those in the next column are being asked of school administrators and teachers because of an increasing awareness of a need.

Adult education is in the midst of growing pains. Vocational, cultural and recreational deficiencies are forcing educators to broaden the traditional concept of their schools. Evening schools are expanding into opportunity and community centers. Because of their increasing needs, adults now want to use their schoolhouses to obtain skills for present or future jobs, knowledge of the sciences and arts and reinvigoration through hobbies and physical activity. Schoolmen need some knowledge of the technics and procedures that are effective in teaching adults. Such knowledge must be obtained quickly and efficiently because adults react to poor learning situations by discontinuing their attendance and becoming embryonic or articulate opponents of education.

The pressing problems fall into five general areas: (1) philosophy or guiding ideas, (2) administration and organization, (3) understanding of adults themselves, (4) adult education and the community and (5) methods and materials.

To assist teachers and administrators in meeting the demands for the expansion of adult education and to direct schoolmen to ready guides among the growing number of technical works in adult education, this article presents short introductions to some books that are essential. The intention is to give diversification and broad spread rather than extensive treatment to any one area.

Philosophy

In 1940 Hughes Mearns wrote about the personal experiences of individuals with whom he had worked. The book is called "The Creative Adult." The author demonstrates that the possibility of providing creative living for adults is no less real than their urge for creative experience. This book should open to adult educators potential adventures in fields that have been considered a bit too airy and too beautiful for our blitzkrieg shrouded world. This is by the man who in 1910 wrote "The little man who wasn't there."

The outstanding philosophy of adult education comes from a practical man. Everett Dean Martin's ability to fill Cooper Union's auditorium each week for fifteen years while he just talked was remarkable adult education. This liberal educator, who was at home with Socrates and Morse Cartwright, wrote "The Meaning of a Liberal Education." In a beautiful style, with a keen knowledge of men and history, this book portrays the far reaches of our hopes for education.

As beauty is of the spirit so is it of the mind. We need fewer books and more readers, despite L. P. Jacks' pleasant lectures to the contrary in his "The Education of the Whole Man."

This collection of lectures and essays by the brilliant English adult educator is a plea for educators to make better people through re-creative experiences instead of producing mere "mind culture." Philosophical writing makes the book happy reading. It should be read when the Black Fridays of attendance threaten our faith. If we need fewer books as we maintain, Professor Jacks' contribution will not be burned unless it be by those who hold adult education to be nothing more than teaching typists to attain unmarketable skills.

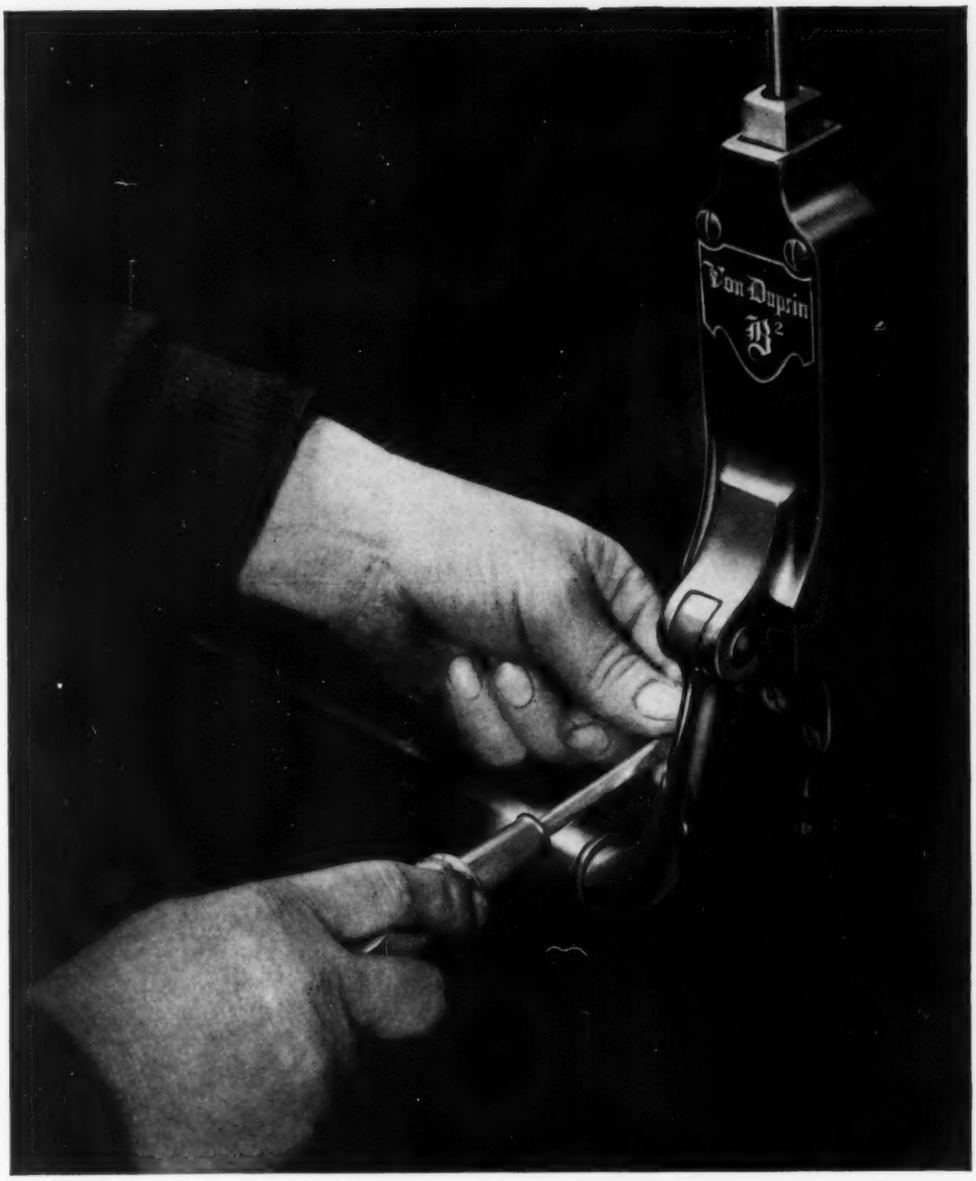
Administration

Lyman Bryson's "Adult Education" closely approaches a text and is a prerequisite. It begins, where all good books on administration should begin, with an analysis of the five social functions that adult education is intended to perform: remedial, vocational, relational, liberal and political.

Few, if any, of the phases of adult education have not been discussed by this author, whose experiences in the actual job of adult teaching have been wide. The book is easy reading and it has the practical man's point of view. It is theoretical only as theory emerges from day-to-day school problems. It is on the school side of adult education and, consequently, gives direct help to schoolmen. Written in 1932, it does not discuss the present problems of recreation and youth but does give a careful analysis of the scope and organization of adult education. It has been the Bible of the secondary school social science teacher who has been made principal of an evening school with no previous adult educational background.

"Rural Trends in Depression Years" by Brunner and Lorge should be read by all who have farm areas to serve. Two chapters of the book are devoted to adult education dealing with the organization, agencies and programs of adult education in rural America. Of special significance is the discussion of the highly developed and effective agricultural extension, the operation of which has many suggestions for adult education everywhere. The book is filled with factual material that is valuable for planning programs of rural adult education.

In the growing field of adult vocational education there is no comprehensive reference. The defense program may bring forth something. To fill the void the best work is "Objectives and Problems of Vocational Education" superbly edited by Dean Edwin A. Lee. Unfortunately, its primary concern with education for work precludes detailed treatment of the adult phases of what is



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becoming the major concern of administrators of adult education.

At present there is an imperative need for a thorough scholarly work on recreation as it pertains to the educator. Much has been said and more has been done to force the educator into the education-for-leisure movement. No work exists to guide him. "Introduction to Community Recreation" by Butler presents the only help. It is primarily written for executives in city recreation departments and college recreation classes.

The adult education sections of the surveys of the Hartford public schools in 1937 ("Forward to the Fundamentals in Education" by George D. Strayer, N. L. Engelhardt and Associates) and the Pittsburgh public schools in 1940 ("The Public Schools of Pittsburgh, Pennsylvania" by George D. Strayer, N. L. Engelhardt and Associates) indicate what is important for adult education and recreation and what evaluators of adult education programs consider significant. The Pittsburgh report presents a pattern for adult education drawn for the practical administrator. It can render specific assistance to those seeking to evaluate their program against the changing adult education needs in urban communities.

Mention should be made of "Outposts of the Public School" by Watson Dickerman, which gives a picture of developing patterns of organization and program of community adult schools under public school auspices.

Adults

Facts based upon the best experimental and statistical methods are needed for adult educators. Prof. Edward L. Thorndike's definitive work, "Adult Learning," is a "must" book. It establishes the fact that it is possible for adults to learn and thoroughly documents its findings. Most elaborate experimental results are reported on learning, habit breaking, forgetting and many other phases of adult education. Our leading psychologist makes the book answer once for all the recurring question "Can I learn anything after being out of school ten years?"

Doctor Thorndike's later book, "Adult Interests," is of equal importance because of the basic necessity of building programs for adults on their interests and needs. The equivocal nature of adult interests, how to understand them and what can be done about it are analyzed in this book.

Communities

An excellent example of a community study is the Chicago Recreation Survey, which is reported in four volumes that appeared from 1937 to 1939. This is the most exhaustive study of its kind, is readable and has much value because of the quantity of illustrative material included. "How to Make a Youth Survey," published by the American Youth Commission and prepared by Howard M. Bell in connection with the youth studies, is a helpful guide to those who will recognize the importance of working out problems from their foundations.

Much literature on modern social problems, such as unemployment, housing, youth and community organization, is basic in those phases of adult education that are community-wide in scope.

Ruth Kotinsky, after a wide field study, analyzes and illustrates the potentialities and difficulties of community organizations for consolidating and planning adult education in her book entitled "Adult Education Councils."

Materials and Methods

There is no text on materials, methods and technics in adult education because the situation differs from other parts of education. In adult education the most artistic teaching consists of a cooperative exploration into fields of knowledge by student and teacher in a mutual quest for learning. This kind of teaching defies the rules and specific directions characteristic of child training.

In the field of teaching helps and literary education, valuable work has been done by the W.P.A. These reports, which can be obtained from the national office, as well as the regional studies present some of the latest developments and experiments in this field. This is particularly true in cases in which state departments of education have utilized the W.P.A. educational program as experimental. Connecticut, Colorado, Pennsylvania and New York have duplicated some good technical material on community center technics, teacher training by conference methods and in many of the emerging hobby fields. Some of the crafts instructional material and community studies are valuable.

The field of adult literary education is declining in spite of the recent spurt resulting from the social security requirements. There is, however, much work to be done in this area in some sections of the country. For a comprehensive treatment of methods and materials reference must be made to a book now all too old, "Adult Elementary Education," by Hulda F. Cook and Edith M. Cook. In reading, an excellent and practical book is "Adult Adventures in Reading" by Elizabeth C. Morriss, which has many useful extracts for class use.

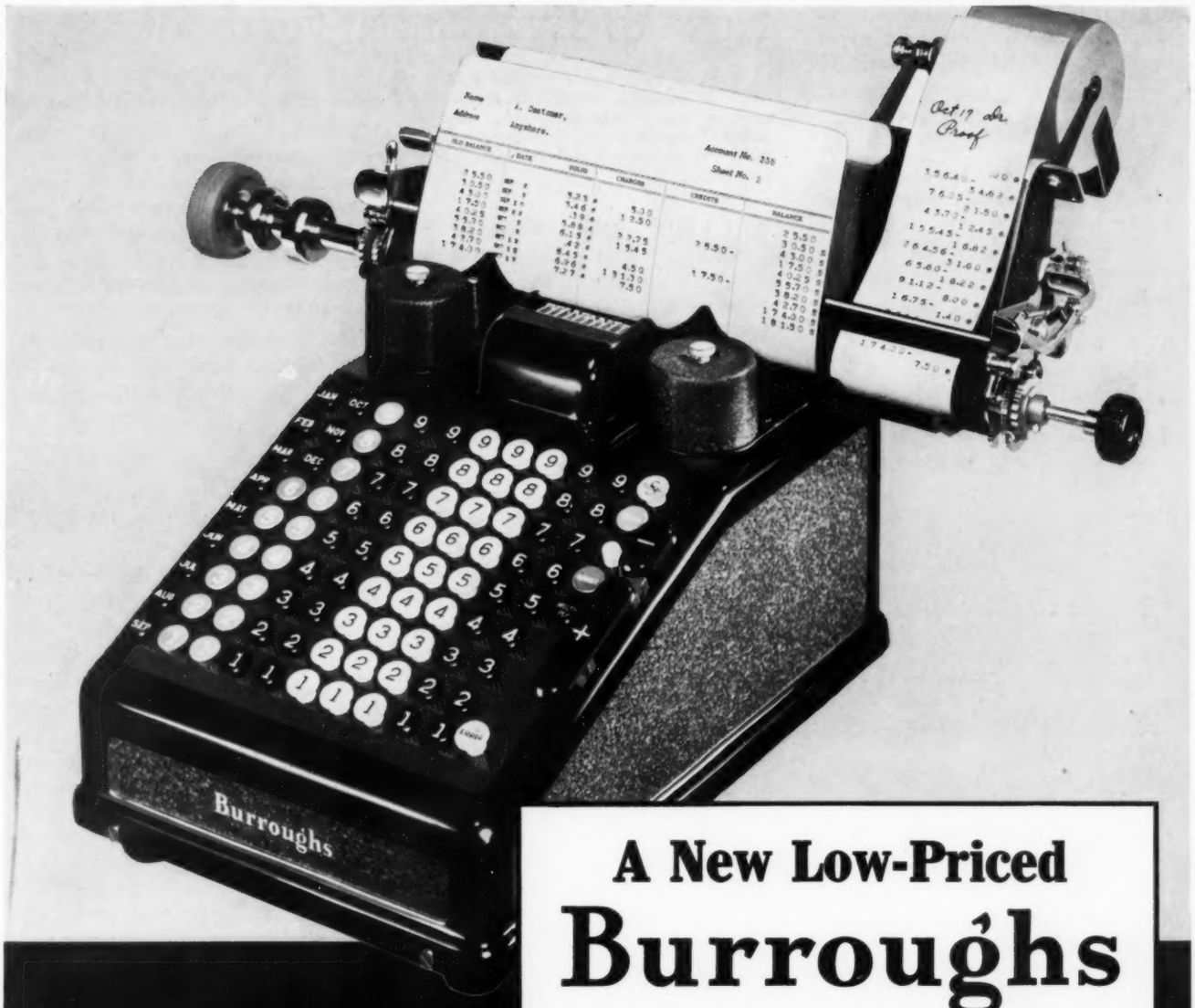
Recreation has become integrated with or a part of many adult education programs. Other than the philosophical statements of the Educational Policies Commission and the technical skills books of the physical educators there is little amid a lot that can help the adult educator.

The National Recreation Association has published many valuable game books and guides to social recreation, crafts and sports programs that have great practical value in their limited sphere.

General Sources

"Adult Education in Action," edited by Mary Ely, is made up of carefully classified abstracts of the best articles published during its first ten years (1929 to 1939) in the *Journal of Adult Education*, the organ of the American Association for Adult Education. Another valuable reference is the "Handbook of Adult Education in the United States," edited by Dorothy Rowden, also a product of the association. It defines the areas of adult education, gives illustrations and references. Ownership of these two books would greatly shorten reference work.

In 1936 the American Association for Adult Education embarked on a project of appraising the social significance of adult education. From the studies made a series of books on various aspects of adult education has been published. Each one takes a particular type or program of adult education, describes and illustrates



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what is being done and lays special emphasis on the significant experimentation that is under way. The list of these little books follows:

"Listen and Learn" by Frank Ernest Hill (radio).

"Why Forums?" by Mary L. Ely (local forums under community and public school auspices).

"Enlightened Self-Interest" by Dorothy Rowden (programs of business and industry).

"The Civic Value of Museums" by T. R. Adam.

"Educational Experiments in Social Settlements" by Gaynell Hawkins.

"The Music of the People" by Willem Van de Wall.

"Women in Two Worlds" by Mary L. Ely and Eve Chappell (women's clubs).

"Man-Made Culture" by Frank Ernest Hill (men's clubs).

"The Public Library—A People's University" by Alvin Johnson.

"Outposts of the Public School" by Watson Dickerman.

"Parents in Perplexity" by Jean Carter.

"Everyman's Drama" by Jean Carter and Jesse Ogden.

"Rural America Reads" by Marion Humble.

"The Museum and Popular Culture" by T. R. Adam.

"Educating for Health" by Frank Ernest Hill.

"The Church and Adult Education" by Bernard E. Meland.

"The Agrarian Revival" by Russell Lord (agricultural extension).

"Motion Pictures in Adult Education" by T. R. Adam.

"Training for the Job" by Frank Ernest Hill.

"Adult Education Councils" by Ruth Kotinsky

"The Worker's Road to Learning" by T. R. Adam.

"Education for Social Understanding" by Gaynell Hawkins.

The following four books are in preparation.

"The Literature of Adult Education" by Ralph A. Beals and Leon Brody.

"University Extension" by James Creese.

"Leader Training in Adult Education" by Harry A. Overstreet and Bonaro W. Overstreet.

"Adult Elementary Education" by Ruth Kotinsky.

It is the hope that this article may lead the reader to browse or read more deeply about adult education in other books and magazines. This hope to intrigue the reader further is the closest that the new adult education comes to dogma.

How to Evaluate a Textbook

The following is an abstract of a statement on social science textbooks that has recently been released by the American Committee for Democracy and Intellectual Freedom.—Ed.

NATION-WIDE discussion of school textbooks on history and the social sciences should be welcome by all who wish to preserve the American way of life. Every parent, indeed every citizen, ought to take an active interest in the schools, the adequacy of their financing, their courses of study and the books and other material they use. The more efficiently this interest is organized in parent-teacher associations, fathers' and mothers' committees, women's clubs and church groups the better.

If the recently aroused concern over the character of textbooks leads to wider and deeper interest in the education provided for American children, it may become a constructive force.

It is not easy to maintain an educational system that is at once autonomous and organic; yet the United States is dedicated to the attempt, which is one of the supreme adventures of mankind. Here is a fundamental reason for caution in direct lay criticism of such educational means as textbooks.

The common interests of a democracy are frequently assailed by partisan pressure groups. The schools are no exception to this rule. Recently, there have been numerous onslaughts upon textbooks by groups that have condemned brief passages isolated from their contexts and have brought pressure upon boards of education to ban the books without more ado.

Although we grant the right of these citizens to their opinions, we urge other citizens to exercise their similar right and to insist that all school books coming under fire shall be examined thoroughly and fairly before their fate is decided.

Attacking textbooks is easy; evaluating them fairly is hard. The latter requires a judicial attitude of mind, up-to-date knowledge of the subject treated, familiarity with school curriculums and practical experience in teaching pupils of the age for which a book is designed. Any group that takes part in the discussion should ask itself which of these qualifications it possesses and what qualifications must be provided by other groups. Above all, every participant should strive to promote honest inquiry and to avoid acrimonious controversy that generates more heat than light.

The fundamental criterion to apply is whether a book tells the truth. Telling the truth about history, economics, sociology or political science is a difficult task. The facts are so numerous that only a small selection from among the multitude that is presented can be included in an elementary text.

One obvious rule is that no facts should be stated that cannot be supported by evidence. Another rule, less obvious but in our opinion sound, is that it is better to limit the range of problems treated in an elementary text to a number that can be dealt with rather fully than to attempt a coverage so wide that only the bare bones can be exhibited. The topics chosen for discussion should be broad in scope and of high significance.

Among the social facts of fundamental importance are social differences. Many of the problems presented by our past history and current practice are the subject of lively, sometimes bitter, controversy. The writer who tells the truth about these issues must make clear their controversial aspects. He should explain impartially the reasons that opposing groups gave for their opinions. It is wrong either to gloss over our social shortcomings or to exaggerate them in a "debunking" spirit.

If an author states his personal views, he should indicate that they are his own and why he holds them. No youngster is properly prepared for life in a democracy who does not learn to weigh candidly opposing views on social problems.

The text should be adapted to the place it holds in the whole course of study and cannot properly be judged apart from the special uses it is meant to serve. For that reason, the advice of school authorities and classroom teachers should always be sought when a book is under consideration for adoption as a text.

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Personality Difficulties

II—Does Your School Contribute to Them?

CHARLES L. WORTH

Supervising Principal, Lambertville, N. J.

THE schools often initiate their contributions to pupil maladjustment at the top, beginning with the superintendent and other administrative and supervisory personnel. Far too many superintendents are demonstrating how to destroy the mental health of teachers. These seem to be the rules they follow:

How to Demoralize Teachers

Criticize a teacher adversely in the presence of pupils and faculty.

Fail to comment on good technics and mention wrong practices only.

Insist that there is only one correct method.

Imply that every error in judgment is an evidence of disloyalty.

Continually praise fine achievements of other teachers.

Take notes during observations but never discuss them with the teacher.

Express unalterable faith in standard test norms.

Change right decisions to wrong after pressure has been exerted from outside.

Arrive at hasty conclusions in matters of discipline.

Hold innumerable teachers' meetings dealing with trivial affairs.

Demand quantities of written reports, summaries and plans.

Always insist upon the observance of the letter but not the spirit of the law.

Discuss one teacher's weaknesses with another.

Interrupt lessons to display superior knowledge.

To the question "Do you believe that administrators, supervisors and principals seriously affect the teachers' mental health, which, in turn, affects the mental health of boys and girls?" put to 17 superintendents in large cities, 10 answered yes; 6, no, and 1, some.

The teacher's mental health depends considerably upon her successful experiences in the classroom. Any action on the part of the superintendent that detracts from successful experience is to be condemned in the light of mental hygiene. A large task confronting the school is to purify itself of practices that cause teacher and pupil maladjustment. The observation of individuals and groups progressing from one teacher to another leads one to the unalterable conclusion that the teacher's personality determines to a large degree the successful or unsuccessful behavior responses leading to the adjustment or maladjustment of school children.

Because of her position of authority, the viewpoints, prejudices, ambitions, attitudes and personality makeup of the teacher exert upon every pupil a subtle, irresistible molding influence that makes either for mental health or mental disharmony.

A dyspeptic teacher can quickly dampen the ardor of a roomful of children so that they become soured on everything pertaining to the school. This is particularly true of younger children who tend to transfer their dislike for the teacher to the whole educational system and who may thus form an aversion to study and begin to fail. The dyspeptic teacher is inclined to emit impatience, irritability and cantankerousness, even though she may make a desperate effort to be sweet and even-tempered and to hide the disagreeable feelings produced by her upset digestive system.

Effect of Teachers' Attitudes

In a questionnaire I recently submitted to a number of city superintendents, 13 answered in the affirmative and 4 in the negative to the question "Is it your opinion that much child maladjustment is caused by teachers' maladjustment?" The answers could be interpreted as an indication that school superintendents on the whole are cognizant of the relation between the teacher's personality and maladjustments that are apparent in pupils.

School children tend to take on the behavior patterns of the teacher, for good or ill, reflecting the happiness and stability of one teacher and becoming emotionally unstable as the result of daily contact with another. The teacher who is a wholesome, well-adjusted human being seems to have a tremendous influence in producing the kind of atmosphere in which other human beings thrive. Friendliness, understanding, adaptability, these apparently simple elements of everyday living are some of the major factors in mental hygiene and they are, at least in part, within the control of teachers in their own classrooms and with their own groups of children.

Better Adjustment Needed

One of the fundamental needs of the educational system, from the mental hygiene point of view, is the better adjustment of the teachers themselves. Release from fear, opportunity for the cultivation of diverse interests, freedom for self-expression and the privilege of continuing their profession after marriage would go far toward re-creating the whole school personnel.

In a number of cities in the United States fairly elaborate integrated organizations have been established for the purpose of aiding maladjusted young people and preventing adjustment problems from arising in others.

The public school system of Rochester, N. Y., has worked out an interrelated and coordinated plan that comes under the head of "child services." At the head are the superintendent or assistant superintendent and a coordinator of child services. The services are divided into seven departments, each maintaining a director and a staff with specific well-defined functions.

The divisions are as follows: visiting teacher department, child study

"We'll first hear from Andy Adams"

Gee whiz! Why does the teacher always have to pick on me—just 'cause my last name starts with an "A" instead of a "Z." I got up and went to the front of the class. These extemp-extemporaneous speeches sure are a pain in the neck. What the heck could I talk about for three minutes. I couldn't look at all the guys who were laughing—so I looked out the window.

But I couldn't do that very well either. The darn old shades were down and sure made the world a dark and dreary place. It's a wonder Pop doesn't come up and sell them "Tontine"* shades—they sure need 'em. That's an idea! I turned and went right into Pop's spiel of how "Tontine" shades admit 140% more light without any eye-straining glare—proved by laboratory tests, I told 'em. How they wouldn't crack, fray or pinhole! How soap and water made them look like new!

Pop says I'm a chip off the old block! For a week after I made my speech he got an order for "Tontine" shades from the school. So everybody's happy around here. Pop made a sale; we kids don't have to strain our eyes to read when the shades are down; and the teacher's happy because we're doin' better work. (Pop bought me a new catcher's mit, too.) He says that I should be a salesman—maybe that isn't such a bad idea providin' I could sell something worth while like "Tontine" shades!

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and special education department, department of educational and vocational guidance, department of coordination and research, health and physical education department, parent education and child development department and attendance department.

In Chicago, Grace Munson, the director of the bureau of child study, expresses the philosophy of the bureau in this manner: "The first obligation of effective guidance in schools is the removal of frustrations that have their origin in routine school practices." The correction or alleviation of limiting physical and social factors is an immediate corollary. The goal is security and daily happiness for each child, with development in self-appraisal and self-guidance as he gradually progresses in education.

Supply Data on Pupils

One department of the bureau of child study is called the adjustment service and was inaugurated by Supt. William H. Johnson four years ago. It was developed to furnish data on the individual needs of all of the 450,000 pupils in the schools, from kindergarten through high school, and to interpret these data to the classroom teacher and to the children. Some of the goals of the service are to individualize the mastery of those academic skills and knowledges that every child needs in order to be comfortable and productive in our society; to set the stage for daily success; to meet the problems of the improvement of reading; to furnish individual tutoring for children with reading or other academic difficulties; to correct or alleviate physical defects; to refer social problems to competent social agencies, and to teach self-appraisal and self-guidance, starting early in the grades and culminating in an accredited course in self-appraisal and careers in the first half of the senior year.

Finally, the service is designed to graduate every pupil with some knowledge of the pattern of his abilities and achievements, with some understanding of the world of work and education and with two plans that he has helped to formulate, *i.e.* one for work and one for continued education, according to his immediate circumstances and subject to change with the needs of a changing individual meeting the exigencies of a changing world.

Bess Goodykoontz, U. S. assistant commissioner of education, has said that there is no community service that has shown a more phenomenal growth during the past quarter of a century than the organization of clinical facilities for the adjustment of behavior and personality problems of children.

Rural Areas Lack Clinics

Unfortunately, little progress has been made in developing these facilities in the smaller cities and rural areas. According to George S. Stevenson, approximately 80 per cent of the service of child guidance clinics is offered to communities with more than 150,000 population, whereas the smaller communities, which comprise 75 per cent of the population of the United States, receive only 20 per cent of the total service. Furthermore, this 20 per cent has been conducted, for the most part, in a somewhat disorganized fashion.

Some schools are permitted to take advantage of the facilities of psychological and psychiatric clinics in near-by universities. In Massachusetts an arrangement has been established whereby more than 200 towns in the state are rendered service by 15 traveling school clinics.

The staff of each is composed of a psychologist, a psychiatrist and a social worker. The final recommendations of the psychiatrist, who is in charge of the clinic, considers educational, social and physical adjustments that should be made, and action on the case is left with the school authorities and parents.

Many different types of clinical organizations are to be found throughout the United States. There are county and city programs developed in coordination with the state. There are separate tax-supported, as well as state organized, clinics, such as that in California. In the California program two features that have been given special emphasis appear to be highly significant. The first is the education of the teacher in capitalizing her day by day contact with her pupils in the interests of their mental health. The second is the need for active cooperation on the part of all school and community agencies that are concerned with the individual pupil and his problem.

Some school people are intelligently initiating and guiding parent education programs in their cities for the purpose of furnishing instruction in child development and mental hygiene. Much of the work is carried on in study groups that are generally under the direction of a lay leader who has had some training for his duties. Supt. John A. Sexson of Pasadena, Calif., regards the beneficial effect of these classes upon parents and their attitudes toward rearing children as almost beyond belief.

This movement is genuinely wholesome since its aim is to prevent maladjustments. Similar study groups composed of teachers could well become a part of their in-service training.

Damage Already Done

Underlying all these fine services for child adjustment is the tragedy that much has to be undone that might have been prevented. When schools become institutions of success and not places of failure, fewer such services will be needed. The day must surely come when schools will be managed in such a way that no matter what physical or mental handicaps children may have, they will have frequent opportunities for successful achievement and praise for productive effort within the limits of their own capabilities.

To prevent children from having mental conflicts, from acquiring complexes and from becoming the prey of inhibitions or fears constitutes a part of the teacher's task, a mighty task that raises teaching to the level of a great profession.

Schools have contributed all too freely in the past to personality maladjustment in children and have given far too little thought to the many opportunities for obtaining pupil adjustment through an intelligent plan of education based on the principles of mental hygiene. The trends toward progressive philosophies of education, more sympathetic school administration, the elimination of fear technics, better training and adjustment of teachers, the inculcation of desirable behavior patterns and the establishment of more widespread clinical services and parent education groups, all point directly to a significant contribution by the school to personality adjustment.

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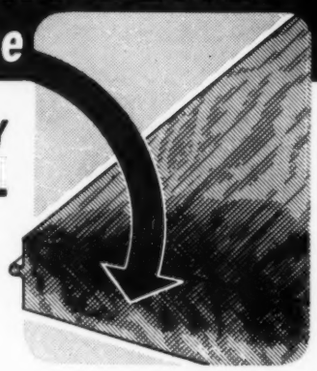

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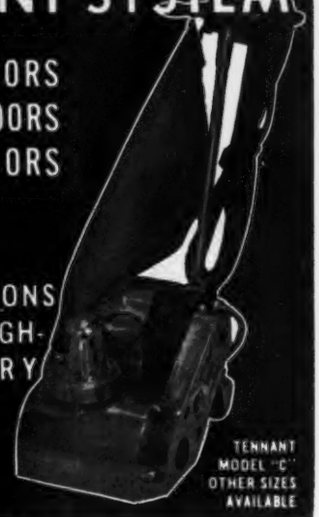

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Legislation in Early 1941

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TIDINGS from half a dozen states of the South and West whose legislatures adjourned early this year indicate that progress continues toward more substantial state support of public schools.

North Carolina's appropriations for the support of the eight month school term and for other school functions, exclusive of teacher retirement, aggregated $28,988,324 for 1941-42 and $30,394,233 for 1942-43. These sums include $600,000 for the first year and $710,000 for the second year for vocational education, nearly doubling the current appropriation of $350,000 for that purpose. They also include $30,000 a year for the continuance of adult education and $200,000 a year for carrying on the free textbook program.

Increase Over 1933

These figures furnish an interesting contrast with 1933 when the state first undertook full support of the eight month program. For that year the total appropriation was $16,000,000; $81,000 was allotted for vocational education; no provision was made for adult education or for free textbooks, and teachers' retirement had not been considered.

West Virginia appropriated as state aid to supplement the general school fund $14,975,000 for the year 1941-42 and $15,125,000 for the year 1942-43. These sums are to be distributed to the counties for general school support, with the exception of $25,000 which is to be available to the state board of school finance to aid counties in providing instruction for crippled children. Each county receives from the state either 45 per cent of the cost of the foundation program or the difference between the cost of the foundation program and the local school revenues, whichever is greater. The amount remaining for distribution as state aid then goes to the counties in uniform proportion to the amount actually levied for current school purposes in each county during the preceding year.

Tennessee's annual appropriations for the next two years apparently aggregate about 10 per cent higher than those of two years ago. The annual amount to be distributed to the counties for elementary schools is $7,250,000 as compared with $7,000,000 in 1939, and for high schools, $1,150,000 as compared with $950,000 in 1939. Appropriations of $50,000 for elementary supervision and $325,000 for transportation remain the same. The new appropriation for school libraries is $50,000 as compared with $60,000 in 1939, and $75,000 a year is now deemed sufficient for replacement of free textbooks as against $325,000 allotted two years ago.

There is also an appropriation of $95,000 a year to supplement county superintendents' salaries, and $250,000 a year for vocational education. The total for state institutions of higher education is $1,710,000, which is nearly $400,000 greater than the appropriation made two years ago.

Idaho appropriated $2,500,000 to the public school income fund for the biennium. This is larger by $500,000 than the appropriation for the preceding biennium. The state school fund has an additional income of about $1,000,000 from endowment, making a total of about $3,500,000 available for the next two years. An effort to restore certain allocated taxes to the school fund was defeated. Four revenue bills were introduced to make possible a reduction of the property tax for state purposes and to provide more money for the school fund and other state purposes. These included a liquor tax, a beer tax, a tax on corporation dividends and a cigar tax. Only the liquor tax was enacted.

Montana enacted a measure dealing with state finances that reduces the number of earmarked sources of state school revenue and takes a step toward the principle of deriving state school funds from appropriations out of the general fund.

A companion act appropriated $700,000 to the state public school general fund, and this fund continues to receive, in addition, 25 per cent of the receipts from the personal income tax, 25 per cent of the corporation license tax and the whole of the freight line tax. This probably means that the total accessions to the state school fund will be somewhat larger during the ensuing two years than during the preceding biennium.

Montana also appropriated $100,000 for each of the next two years for special equalization and stipulated that no school district levying 15 mills or less can share in the common school equalization fund. Further conditions restricting the eligibility of very small schools to share in this fund were also added.

This state appropriated $100,000 for each of the ensuing two years for teachers' retirement, plus $4000 each year for the administration of the fund. A new amendment to the retirement act prevents any person who is drawing a salary from any public source from participating in the retirement benefits.

Aid for Distressed Districts

South Dakota appropriated $775,000 for each year of the ensuing biennium to be distributed to all school districts as a property tax replacement. Apportionment is on the basis of the school census but no district can receive an amount greater than the sum it raises by local taxation. There is also an additional appropriation of $150,000 per year for aid to distressed school districts. These appropriations are identical in size with those made for the same purposes in 1939. The same is true of an appropriation of $12,500 per year for reimbursement of districts containing tax-free Indian lands.

The state also appropriated $600,000 per year from which the counties containing nontaxable school lands and holding other farm lands as a result of foreclosures of loans from the state permanent school fund are to be paid the equivalent of the taxes on such lands.

North Carolina allowed the maximum compulsory school attendance

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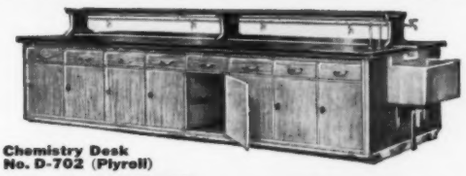

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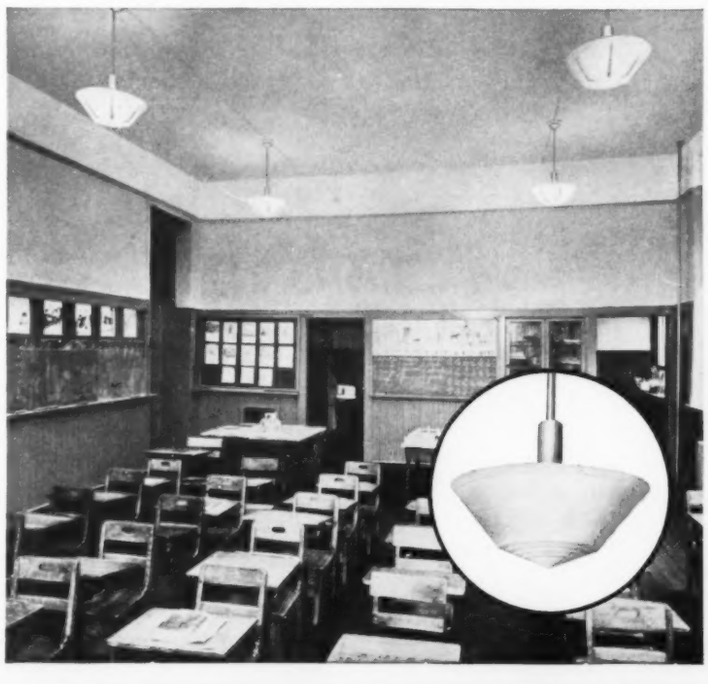

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age to remain at 14, but made provision for the gradual addition of a twelfth grade to the schools, which have hitherto been on an eleven grade basis. An appropriation of $50,000 for the first year and $400,000 for the second year of the biennium was made for the purpose. South Dakota changed the ages of compulsory school attendance by lowering both the lower and upper limits by one year. Formerly from 8 to 17, the compulsory age is now from 7 to 16.

For some years Montana has consistently followed the policy of expanding transportation in lieu of maintaining very small schools. The number of high schools in the state has been reduced from 228 to 198, and within less than a decade more than a thousand one room schools that had enrollments of fewer than 10 pupils have been closed.

A new statute providing for the financing of transportation furnishes state transportation aid in the sum of $300,000 and widens the leeway for both counties and local districts to use either their regular maintenance levies or extra levies for transportation.

South Dakota authorized consolidated school districts to purchase public liability insurance on buses that are being employed for transporting children to and from school.

Utah appropriated $150,000 for the ensuing biennium for scholarships of not to exceed $100 per year to be awarded to students in the state junior colleges who reside more than 40 miles from the college most accessible to their homes. The amount awarded in each case is to be based upon the extra expense occasioned by living more than 40 miles from the nearest state junior college and is to be determined by the state board of education, which may also designate at which junior college the scholarship shall be tenable.

The act applies to the lower divisions of the University of Utah and of the Utah State Agricultural College, as well as to state-supported junior colleges located at five other points in the state. It is an interesting effort to equalize opportunity for junior college attendance without increasing the number of junior colleges.

The West Virginia legislature enacted several increases in beginning salaries of teachers holding certificates of various grades. The monthly pay of holders of the standard normal certificate was raised from $100 to $105. The beginning salary for holders of the new elementary certificate, based on ninety-six hours of college work, was set at $110. Beginning pay of teachers holding bachelor's degrees was raised from $110 to $120 and that of holders of master's degrees was boosted from $120 to $135.

North Carolina appropriated approximately $660,000 for the biennium to provide for certain salary increases, specifically, the addition of a ninth increment for teachers which raises the maximum to $133.33 per month for "A" teachers and fully restores the maximum in effect prior to 1931. In addition, the state appropriated $50,000 for the biennium to provide a fifth increment for principals. North Carolina also made special appropriations of $250,000 for the first year of the biennium and $507,500 for the second year, in order further to remove the salary differential between white and Negro teachers.

North Carolina established a retirement system for teachers and all other state employes, with a total appropriation of $1,509,076 for the purpose, of which it is estimated that $1,200,000 will be for teacher retirement.

West Virginia enacted a modern and actuarially sound joint-contributory teachers' retirement system that will automatically embrace the teachers retired under the rudimentary noncontributory system that was set up in 1939. Membership in the new system is optional for present teachers but is compulsory for all new teachers. Four per cent of members' salaries (or not exceeding $2500 per year thereof) will be deducted for the retirement fund and an equal amount will be paid into the fund by the state.

Eligibility for retirement begins at the age of 60 years or after thirty-five years of service as a teacher in the state. Provision is made for equitable credit for prior service. The system is to be administered by a board composed of the governor, the state superintendent of free schools, the state treasurer, the state insurance commissioner and three teacher-members of the retirement system.

Idaho empowered the Boise school district to establish a retirement system for its employes and to levy a tax of not to exceed one mill to finance the plan. A bill for a statewide teachers' retirement system was introduced and debated in the house but was killed without a record vote by being recommitted to the appropriations committee.

School Gardening in the Grades

PAUL R. YOUNG

School Garden Supervisor, Cleveland Public Schools

LITTLE financial outlay is needed to put a school-home gardening program into operation in the elementary and junior high school grades of any school or school system. An interested principal or superintendent and a few teachers who are convinced that the job is worth doing can get it started.

Small enrollment fees from the children will finance supplies. Gardening instruction can be made a part of the science curriculum. Local garden clubs or parent-teacher groups will frequently aid teachers in summer supervision if no funds are available.

A home project program of this sort is about the only possible way in which gardening experience, with its consequent benefits in the way of character training, practical information and avocational interests, can be brought to the majority of pupils.

Such projects are valuable and definite links between the school and the community. They strengthen family bonds and please parents because they afford interests in which parents and children can share. Furthermore, they provide a home-centered activity for the children.

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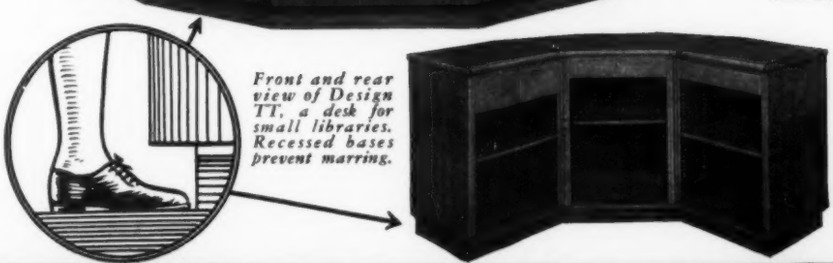

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How to Apply Democracy

BRENTON E. REYNOLDS
High School Science Teacher, Barnesville, Ohio

RECENTLY I received an inquiry from a member of the staff of the Educational Policies Commission, which has been assigned the task of making a first-hand study of the various factors to be found in educational programs that make a contribution to civic education. In the following excerpt from this letter the staff member said:

I have read with interest your article in the May 1939 issue of The NATION'S SCHOOLS, *"Open Letter to Administrators." Since I would be classed as an administrator, in my position as assistant superintendent of schools, I am naturally interested in your comments and those of every teacher who is attempting to think constructively and intelligently about this problem of democracy.*

I am asking you a few leading questions and should like you to answer them fully and frankly.

1. Can you give illustrations of what you would identify as democratic procedures in the method of teaching in the classroom?

2. What are some of the things that you as a teacher would expect administrators to do in order to administer their schools democratically?

3. If teachers and pupils are to share with administrators in formulating educational policies, what would be their attitude toward responsibility for executing such policies?

4. What things should be done in a teachers' meeting to make the meeting democratic?

5. What suggestions would you make for improving teachers' understanding and appreciation of new educational developments?

Following is my attempt to answer these questions:

1. Far more real teaching for living in a democracy would be obtained if the pupils were given the responsibility for planning, executing and testing class activities. Of course, all of this would have to proceed under intelligent teacher guidance. The teacher would have to take more or less authority according to the type and age of the pupil with whom he is working. But in all cases, the pupils should think things through thoroughly before they make decisions. The decisions should then be acted upon fully. Then, from these experiences, more thinking should be done and differences made in the procedures according to the results of the experiences and thought.

The pupils should be given the responsibility for planning the general course within certain limits and for planning and executing all programs, projects, excursions and testing programs. Allow them to meet new situations and solve them in the light of their experiences and intelligence. Insist that they be open-minded on all questions. Teach them to act on the available information but to be willing to change their method of attack and ideas when added information or experience warrants it.

Pupils should increase progressively in their ability to accept responsibility and to execute a task intelligently. Give them the security that is found in a realization of their ability to meet new situations and to solve them intelligently.

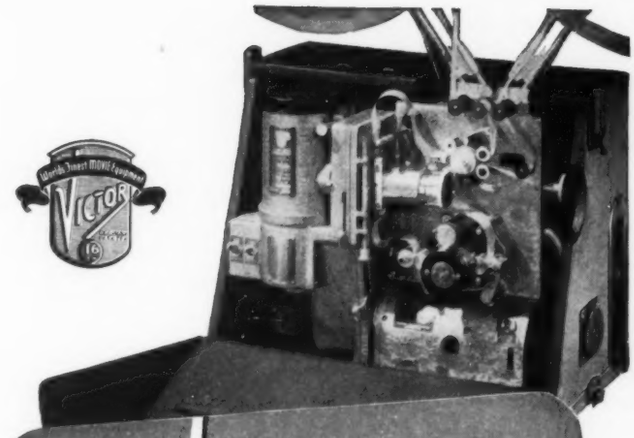
2. Administrators could administer their schools more democratically by not dictating procedures to school committees. These committees should be permitted to think through their problems thoroughly and to act accordingly.

Teachers do not have to be dictated to. If they are dictated to, they, in turn, may learn to dictate instead of democratically to educate their pupils. Administrators can teach, by example, democratic practices and methods of education. It is my belief that it should spread from the administrator to the teacher and to the pupil.

Teachers should be treated as the equals of administrators in their ability to think and should be made to feel reasonably secure while they are carrying out new procedures.

Questions That One Teachers' Group Wanted to Discuss in Teachers' Meeting

1. Teacher tenure; reports as to what other states are doing; advantages and disadvantages.
2. How can high school pupils be taught to read?
3. What are some effective ways of keeping all pupils busy doing worth-while things during a recitation period?
4. How to carry on individual instruction and to keep everyone occupied.
5. Why give examinations; value and use of results.
6. Assignments, when and how best made?
7. What are some devices for interesting careless and indifferent pupils?
8. What is the art of questioning?
9. How can one socialize school work?
10. How can one stimulate thinking, attention and interest?
11. Discussion of recitation, review, study and drill lessons.
12. How can one build up pupil cooperation?
13. Should we teach pupils or subject matter?
14. How can one cover the required work to meet the state tests and requirements and yet not stick to daily lessons?
15. Should we have home study?
16. Is sectionizing desirable?
17. Should we have home visits?
18. What are the advantages and disadvantages of one hour recitation periods with no outside study?
19. What do boys and girls do outside of schools hours?
20. What are the college entrance requirements?
21. Should our school give the same diploma to all graduates?
22. Should we have an activity for everyone, a limit of three for each pupil?
23. How can we articulate subject matter areas?
24. Is any kind of curriculum revision possible?
25. Should we have a form of student government?
26. Should we develop a uniform grading system?
27. Should the slower pupils be helped to keep them eligible for the school athletic teams?
28. What constitutes a pupil load?
29. Should we have more uniform study hall regulations?
30. What amount of time should a teacher devote to school work?
31. How far should the teachers' personalities be subordinated to the school and the teachers?
32. Should not more responsibility be placed (officially) on the pupils for their make up work?
33. How can one be happy as a teacher?
34. How are we using the educational resources of our community?
35. What are the aims and objectives of our high schools?



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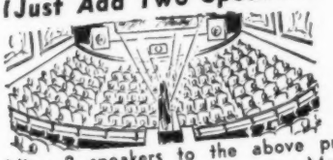

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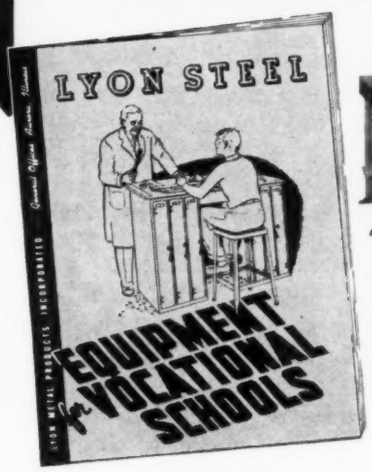

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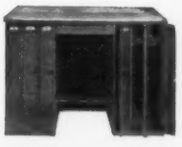

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Many teachers fear to express their sincere and honest ideas to their administrators because of the administrators' dominating attitudes toward all who hold different opinions from their own.

The administrator should provide facilities for carrying out democratic procedures in the classroom. These might include adequate library facilities, typewriters, duplicating machines and supplies and an adequate clerical staff. Insofar as it is possible, teachers should be relieved of routine matters. They should have time during the school hours, as well as after school hours, to plan intelligently and constructively.

3. The teachers and pupils should be willing to cooperate with the administration in accepting the responsibility for the execution of educational policies that are intelligent and democratic—open forums, free and honest discussion, experimentation and logical reasoning, action resulting from experimentation and reasoning; re-experimentation and rethinking.

4. In any teachers' meeting all of the teachers should be encouraged to give sincere, honest opinions on controversial issues. If the opinions are divergent, the problem should be held over a meeting or two. Reports, speakers and studies can then be made of the problem until an intelligent solution is found. Thus, one could obtain intelligent following instead of blind, sometimes unwilling, obedience.

5. A good way of improving the teacher's understanding of new educational developments is a summer course in a modern educational institution. Another method is democratically controlled teachers' meetings. Through discussion, reports on modern books, reports on what other schools are doing and group studies of local problems a greater understanding of new educational developments would be realized.

Thus, the school, the administration, the teachers, the pupils and, ultimately, the community would become dynamic, self-reliant, self-projecting institutions and individuals, capable of meeting change. In this manner we shall develop an educational system that matches and perpetuates our own democracy.

School Costs in Last Decade

FRANK HUBBARD
Research Director, N.E.A.

SOCIAL changes of the last ten years have altered the picture of state spending. During the decade in question, efforts to solve problems of unemployment, insecurity in old age and the need of help on the part of certain groups of our population in maintaining higher living standards caused the states, following the lead of the federal government, to enter new fields of public assistance, public health and public welfare, at an increased cost to the taxpayer.

Lack of financial ability in many of our local governmental units forced state governments to assume an increased share of the cost of functions, financed jointly from state and local sources. The period from 1930 to 1940 was one of expansion in state activity and state spending, marked by two more or less counterbalancing tendencies. States assumed an increased responsibility for the financing of certain "old-line" services, formerly considered wholly or partly local, while at the same time they hastened to include in their budgets new types of payments that would entitle them to share in the benefits of recently enacted federal social legislation.

What we do not know, on the basis of any published information at least, is what has been the net effect of the two foregoing tendencies; whether there has been a shift of emphasis from old to new purposes of state spending, and what has been the extent of such a shift, if it occurred. Yet, to anyone interested in the maintenance of a particular set of governmental services at an efficiency level, this information is crucial.

Friends of public education began to ask, therefore, how the schools fared in the midst of the general expansion of state governmental operations. Did they occupy as favorable a position in relation to that of other state functions at the end of the 1930-1940 decade as at its beginning? Or, did the demands for new and enlarged services in other fields have the effect of crowding to the wall the important function of public education?

These are typical of the questions that came to be heard more and more frequently as the end of the decade drew near. To these and similar constantly recurring questions, no answer could be found.

For the years 1915 through 1932, the bureau of the census of the U. S. Department of Commerce compiled annual statistics on the expenditures of the 48 state governments and the purposes for which these expenditures were made. After 1932 this work was suspended. It was resumed in 1938 by the newly organized division of state and local governments of the census bureau.

It was for the purpose of arriving at satisfactory answers to these questions that the study of the expenditure data contained in state financial documents, upon which the May N.E.A. Research Bulletin is based, was undertaken. The results covering 42 states and Hawaii are contained in the study. For five states complete or detailed figures could not be found.

It is clear from this study that in the decade 1930-40:

1. The total cost of state government increased in 40 of the 42 states; in 39 states the state expenditures for education increased in amount in this same period.

2. At the end of the period 22 states used less of their total expenditures for education than at the beginning of the decade; in 17 states it could be said definitely that the relative financial position of the schools had improved.

3. Apparently, where schools lost in relative position was in the industrial, congested and wealthy states in the northeastern part of the United States. Most of the states gaining in proportion of state funds spent for schools were in the southeastern states.

A later issue of The NATION'S SCHOOLS will report further details of this study, which is to be issued as an N.E.A. Research Bulletin under the title "School Costs and State Expenditures, 1930-1939," May 1941.

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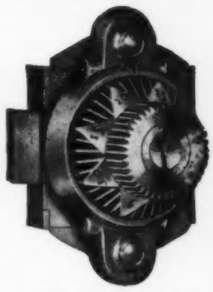

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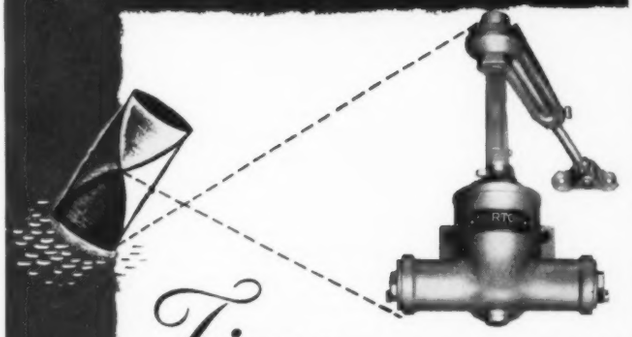

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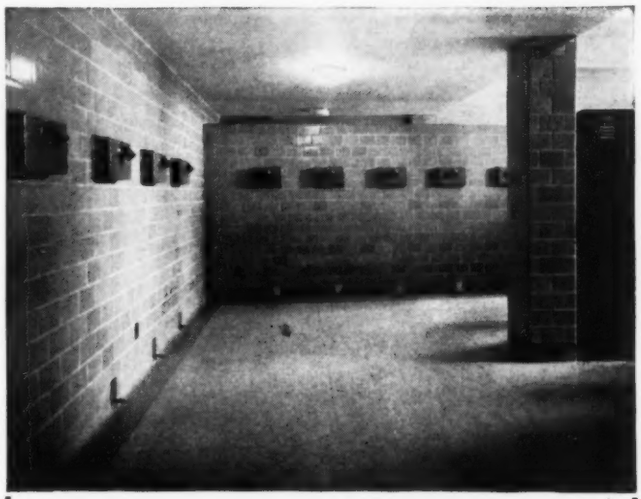

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Standards to Be Met

SYLVIA M. HARTT
MABELLE S. EHLERS and RUTH RUSSEL

THE fact that school lunchrooms vary in size, personnel and other factors must be taken into consideration in attempting to analyze standards of operation. With this in mind we have drawn on personal experiences as food service directors, rather than on any established inflexible standards, to point out some criteria by which school administrators and lunchroom managers may evaluate operations. For the sake of simplicity no effort has been made to differentiate between work units in lunchrooms inasmuch as these are frequently combined owing to lack of space or other limitations.

Atmosphere is an important feature of lunchrooms. Numerous elements, such as color scheme, decorations, choice of equipment, floor treatment, condition of paint and plaster, light, ventilation and freedom from noise, combine to make lasting impressions upon patrons. In food units, cleanliness and order are dominant factors in producing a desirable atmosphere.

The incorporation of color in the decoration of lunchrooms is a satisfying modern note. A few well-chosen pictures and restrained table decoration, such as plants and flowers in season, and colorful posters add interest. Health posters may be used for decoration but they lose value if they are not changed frequently.

In buying equipment, durable, heavy duty, well-designed pieces should be selected. It is often possible to omit some pieces of equipment that are commonly used in commercial restaurants because they have no function in the lunchroom.

The appearance of floors, walls, woodwork, windows and lighting fixtures has a definite bearing on atmosphere; hence, they must be clean and in good condition. Adequate light is essential.

A cold or an overheated lunchroom is uncomfortable. Fans or ventilating equipment may be needed to exclude unpleasant odors. A modern trend is the exclusion of noise. Wall and ceiling construction can do much to eliminate noises associated with lunchrooms.

Potato peelers, steamers, mixers and choppers should be cleaned after each using. The counter, counter equipment and drinking fountains should be clean and shining. Floors should be clean and free from spilled food or crumbs. Atmosphere is important but sanitation is imperative.

A concise summing up of standards for equipment, service, work spaces, employment conditions and, above all, food; these the lunchroom manager and the school administrator should attempt to meet

Adequate refrigeration and storage space are essential. For example, bacterial growth in milk at 72° F., or room temperature, may multiply so rapidly that each bacterium has multiplied 700 times in twelve hours. Bacteria grow rapidly in meats and other foods that are not kept at a few degrees above freezing. Covered containers for storing staples keep out dust and other contamination. Vegetables and fruit should be thoroughly washed whether they are to be eaten raw or cooked.

Working surfaces should be washed frequently with hot water and a detergent. Adequate supplies of hot and cold running water are important. Sinks should be of sufficient size and number to provide for washing vegetables, glasses, dishes (if there is no dishwashing machine) and cooking utensils.

A food handler's examination for every worker eliminates the employment of persons with communicable diseases. Workers should wear hair nets and clean washable uniforms and should adhere to rules of good personal hygiene. They can be trained to keep their hands clean and to avoid touching their hair or any part of the body without washing their hands afterward. Adequate toilet facilities for employes should be available.

Dishwashing is an important part of sanitation. Disease may be spread by improperly washed dishes. Hot water and some satisfactory detergent should be used to remove grease and other food. Contrary to common belief, bacteriologists state that most detergents do not kill bacteria. It is, therefore, necessary that dishes be rinsed in water at 180° F. for at least one minute to destroy most bacteria. The use of drying towels is insanitary. Unless the towels themselves are sterile, the dishes are again contaminated. The best practice is to let the dishes dry in racks and place them in closed cupboards.

Windows and doors should be screened. Garbage and refuse containers that attract flies and other insects should be provided with covers and kept covered.

Efficient management of lunchrooms is necessary to their continued operation. Reports and records are essential because they give information and point out inefficiency in management.

The proper placing of equipment to eliminate steps and prevent crossing of traffic lanes saves time and energy. Work should be scheduled so that jobs dovetail easily. An adequate number of employes is essen-

The authors are state supervisor, School Lunch Project, Michigan W.P.A.; associate professor, Michigan State College, and home economics teacher and cafeteria manager, Central High School, Lansing, Mich., respectively.

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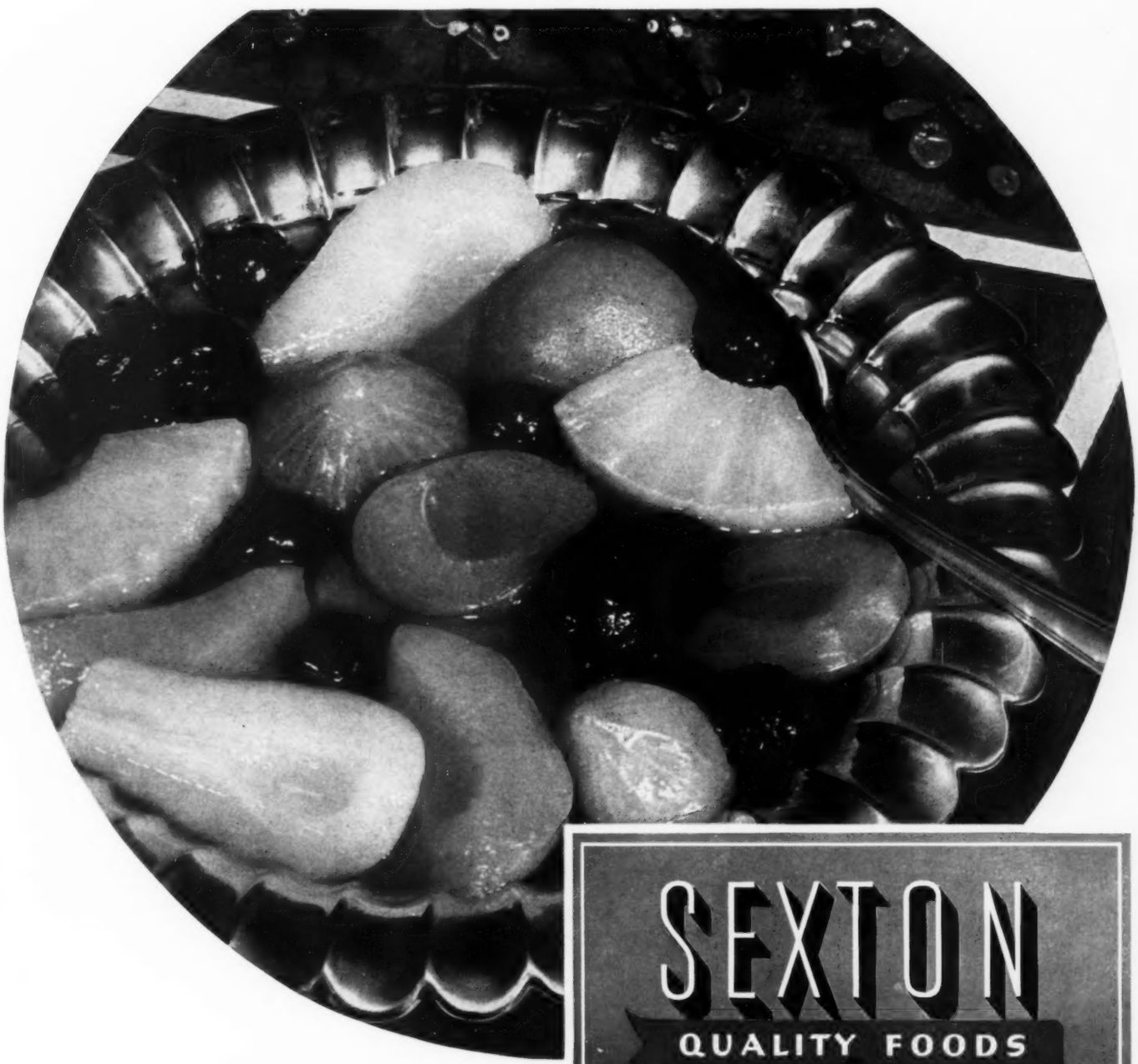

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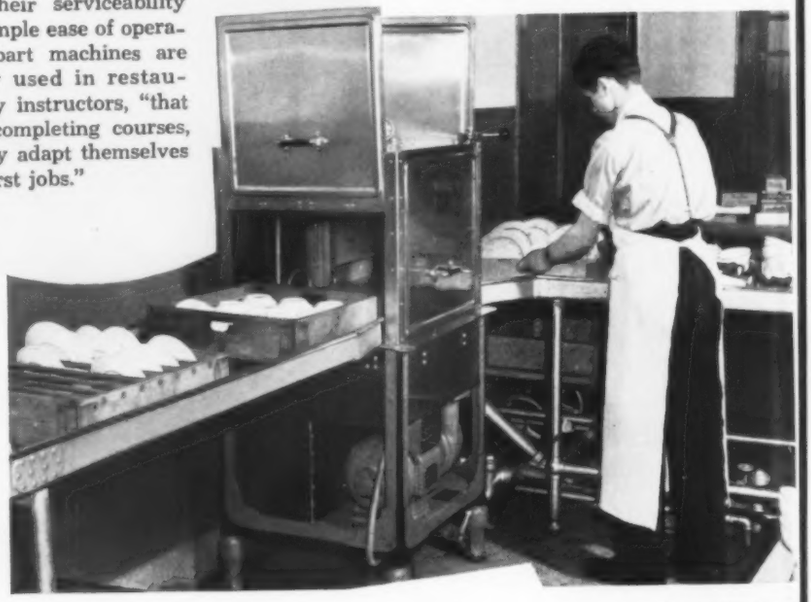

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tial. Tools and equipment should be adjusted to the height of workers and should be placed within reach at work stations.

Purchasing for lunchrooms is a subject in itself. Some rules for good buying are: purchase in quantity and bulk rather than packages, whenever possible; buy goods that are produced locally, if possible; take advantage of lower prices for foods in season.

Conditions of employment reflect policies of management. They may be judged, in part, by the morale of employes. Administrators and managers should ask themselves the following questions: Has adequate working space been provided? Is a minimum wage offered? Does each worker receive at least one meal or, if meals are paid for in cash by the employe, is the wage sufficient to cover the additional cost? Are legal regulations on working hours complied with?

Weekly wages of school lunchroom employes are often low but the hourly wage should be at least the going rate in the community. Are there opportunities for salary increases based on length of service and improved work? Are fire extinguishers provided, are safety hazards reduced to a minimum and is first-aid equipment supplied? Is some sort of accident compensation or insurance provided for employes?

Food is the most important feature of any lunchroom. It should be of good quality, palatable, varied and nutritionally adequate. Overdecoration of food is undesirable, but simple new ways of serving or combining foods will help to maintain sales. The purpose of noon meals at school is defeated if consideration is not given to some simple nutritional facts. It should be remembered that a boy of 14 requires from a fourth to a third more food in total calories than an adult man engaged in such an occupation as teaching school. The demands for growth materially increase requirements of minerals, vitamins and protein. The noon meal should furnish at least one third of the day's requirement and should be so planned that it will adequately supplement the food that is served at home.

In general, each child should be encouraged to eat one main dish of meat and vegetable or meat substitute; a raw vegetable; the equivalent of one glass of milk; some kind of whole grain breadstuff with butter, and a serving of fruit.

Cafeteria managers use many devices to encourage children to select their lunches wisely. The price of dishes that children should select, but ordinarily do not, may be reduced. Location of food on the counter is often a factor in its selection. Prizes in the form of a free lunch may be given to children who choose wisely and posters encouraging good food habits can be used.

Foods should be so prepared that their natural flavors are emphasized. Vegetables should not be overcooked. Pasteurized milk should be bought. Meat should be government inspected. Home canned vegetables should be avoided. Candy should not be offered unless some means is taken to prevent its supplanting protective foods.

The lunchroom does only a portion of its job when it caters exclusively to children who can pay for food. Inasmuch as public schools represent entire communities, provision should be made to care for underprivileged children whose nutritional need is great and whose families are unable to pay for lunches.

Course in Canteen Cooking

CONSTANCE C. HART

Director of Lunchrooms, Rochester, N. Y.

THESE days everybody feels an urge to do his bit in the national defense program. At Rochester, N. Y., about 800 women expressed a desire to do something for preparedness. Accordingly, the American Red Cross sponsored several classes in elementary nutrition; family meal planning, preparation and service; emergency hygiene and sanitation, and a canteen course.

These courses were organized under the guidance of the adult education department with the cooperation of the board of education, which provided the facilities and paid the instructors.

Three classes in canteen work have been organized and conducted by three of the school lunchroom managers. Two classes were held in the afternoon and one in the evening; a fee of 50 cents was charged for registration. The classes, which were well attended, were composed of women with varied backgrounds, all untrained in large quantity cookery. Instruction and practical experience were offered in sandwich making, preparation of beverages, salads and simple desserts, vegetable cooking, and meat and meat substitute preparation. Certain operations, such as making sandwiches, were repeated several times so that some degree of skill could be attained.

A general lesson was included on meal planning and preparation, based on material that had been covered in class and on the American Red Cross manual "Feeding in Disaster." Duplicated material, including tables on weights and measures and equivalents, recipes based on 50 portions and general instructions, was distributed with every lesson.

The food prepared was served in the lunchroom the next day. Each woman was allowed to taste whatever she prepared and if anyone wished to buy the food it was sold to her for the cost of the materials.

It is suggested that in communities in which these courses cannot be held in school lunchrooms arrangements may possibly be made with local orphanages, homes for the aged or welfare depots to use the products prepared. In this way, there will be no loss or waste of materials, and the women will still have the opportunity of working with large quantities.

It was found at Rochester that sufficient time should be allowed for each course so that the skills that are entailed in large quantity cookery can really be developed.

Upon the completion of the course, the name, address and telephone number of each registrant were obtained, and the instructor rated each one according to her ability and special aptitudes. This list is being kept on file for future reference, if an emergency arises.

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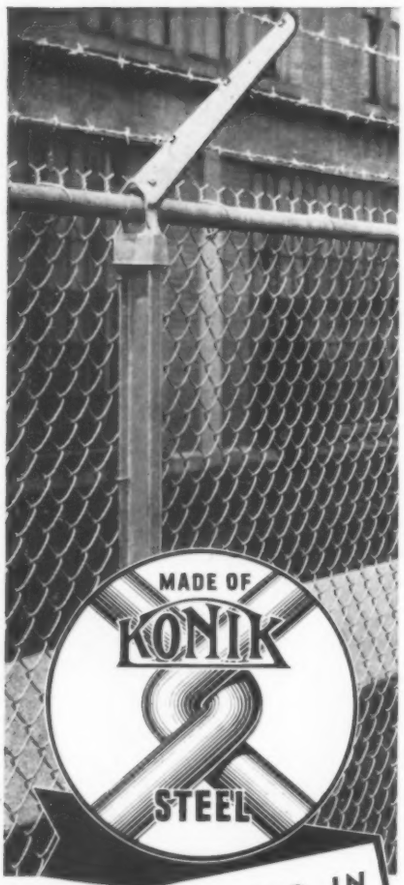

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News in Review

More Defense Training Urged

Following a recent tour of national defense training projects in public schools on the Pacific Coast, 12 well-known school superintendents and former superintendents called upon the American schools to step up their programs of training pupils for defense production jobs.

"School systems must not wait for factories and shipyards to be built before they start training men and women for national defense industries," it was stated in the report issued at the close of the tour.

"In addition to carrying on their regular programs, the schools have established vocational and defense training classes everywhere. They should be utilized to fullest capacity and without delay in this all-out program of defense job training. School superintendents and directors must exhaust every means in their aggressive effort to prepare effectively as many workers as possible, no matter how limited the ability of potential workers may seem to be."

Members of the party composed the 1941 Occupational Education Tour for School Superintendents and were under the leadership of Edwin A. Lee, dean of the school of education, University of California, and former superintendent of schools in San Francisco.

The tour assembled in Los Angeles on April 14 and concluded in Seattle on April 22 following a four day conference at Yosemite National Park.

The study was made possible by a grant from the Carnegie Corporation of New York and the National Occupational Conference.

MEETINGS

A.A.S.A. to San Francisco

The 1942 convention of the American Association of School Administrators will be held in San Francisco, it has been announced by W. Howard Pillsbury, president of the association. The meeting dates will be February 21 to 26, with preliminary meetings on February 18 to 21, inclusive.

Nursery Association to Meet

"Life, Liberty and Happiness for Children Now" will be the general theme of the biennial conference of the National Association for Nursery Education, to be held in Detroit, October 23 to 27. A special feature of the conference will be small group meetings that will be devoted to practical personal consideration of specific problems.

Conference at Stanford

A four day conference built around the theme, "Education for the National Emergency," will be held on the campus of Stanford University, July 17 to 20. Speakers will include Carlton J. H. Hayes, professor of history, Columbia University, and Floyd W. Reeves, director, American Youth Commission, Washington, D. C.

Cafeteria Equipment Exhibit

Manufacturers of cafeteria and kitchen equipment and supplies will exhibit at the annual conference of Food Service Directors in New York, November 6 to 8, in order to give cafeteria directors and managers an opportunity to see the latest equipment used in food preparation and service.

Childhood Study Conference

Approximately 2000 leaders in childhood education are expected to attend the forty-eighth annual National Study Conference of the Association for Childhood Education to be held at Oakland, Calif., July 8 to 12. The program of the conference is designed to aid teachers and administrators in solving the problems that will confront them during the crucial period ahead.

Boston Host to N.E.A.

On June 29 the annual meeting of the National Education Association will convene in Boston. The association will be in session from Monday through Thursday, July 3. Seminars, representative assemblies, general sessions, committee meetings, dinners, exhibits and sightseeing tours will occupy the delegates.

In recognition of the convention, the Boston Museum of Fine Arts has arranged for a special exhibition in which more than 20 other American museums will participate.

Youth in National Emergency

"Children and Youth in a National Emergency" will be the principal topic of discussion at the fifteenth annual Iowa Conference on Child Development and Parent Education to be held June 17 to 19 at Iowa City. The conference will be sponsored by the state council for child study and parent education in cooperation with the Iowa Child Welfare Research Station and the extension divisions of the University of Iowa, Iowa State College and Iowa State Teachers' College.

INSTRUCTION

"Speed-Up" of Education

Average and above average students at Indiana State Teachers College, Terre Haute, will be permitted to take advantage of an academic "speed-up" plan and finish the regular four year course in three years.

According to the plan, which has been adopted in view of the national defense emergency, students who participate in the accelerated course of study will attend college both in the summer and during the regular school terms. Those with a B average or higher may carry one extra subject in every term except the first, thereby finishing the course in a little less than three years.

Pageant of Democracy

More than a thousand pupils and 50 teachers of the public schools of Rochester, N. Y., will participate in a musical and dramatic spectacle to be produced early in June. The pageant, "Ring, Freedom, Ring!" is to be an expression on the part of the children and their teachers of their devotion to democratic ideals.

Recording Growth of Democracy

A series of phonograph recordings entitled "The Growth of Democracy," has been announced by Erpi Classroom Films Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

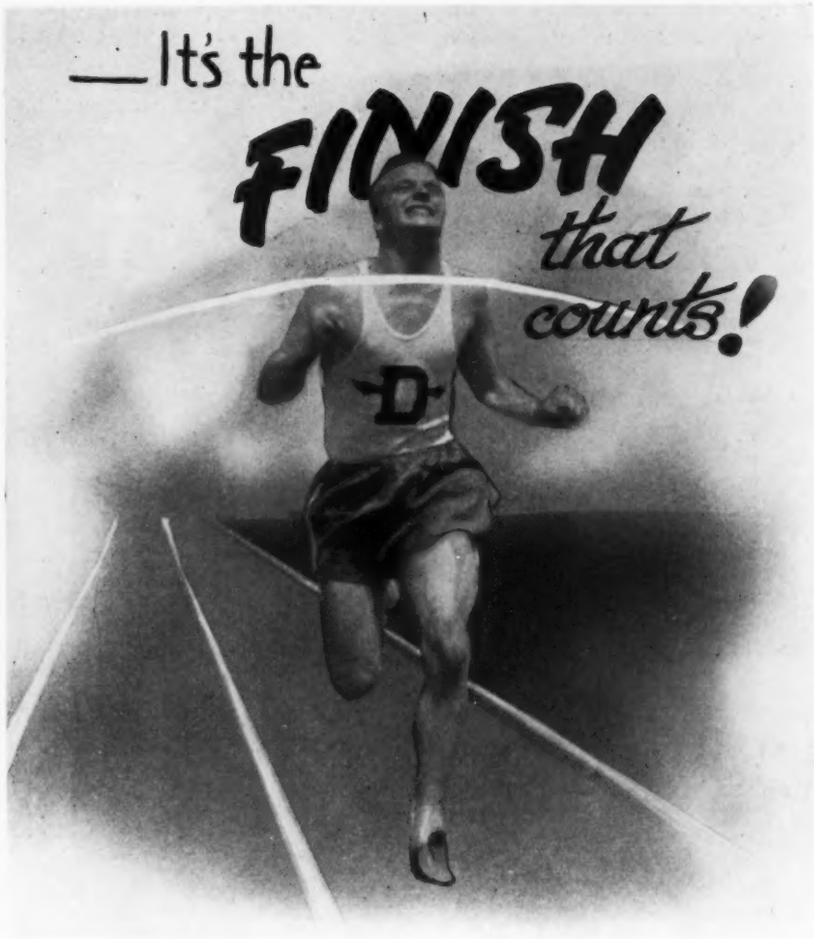
The first group of the series, which consists of 20 recordings on ten 12 inch double faced records, presents dramatizations of important historical episodes in the development of democratic institutions from the signing of the Magna Charta to the adoption of the Constitution. A study guide, which accompanies each album of records, contains suggestions for incorporating the use of the recordings into regular courses of study.

Graduate Courses Offered

Graduate courses are now being offered by 10 departments and the division of teaching at Indiana State Teachers College, Terre Haute, Ind., under a new policy that permits graduate students to take approximately half of their work leading to a master's degree in education in the special fields. The departments that have installed graduate courses are: education, English, mathematics, science, social studies, speech, art, commerce, industrial arts and music.

Hearing Aid for Pupils

A law requiring that all school pupils be tested for hearing disabilities and that lip reading courses be provided for the hard of hearing was passed at the re-



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cently concluded session of the Indiana state legislature.

The law also provides that state teachers' colleges shall help in putting it into effect. Indiana State Teachers College will offer a consultant service to all school superintendents who want a survey made of their local situations. The college will also lend equipment and conduct tests at cost for the school systems that cannot afford to carry out the program.

Textbook Discussion

Only one of the three school boards in Evanston, Ill., has taken action approving the social science textbooks written by Prof. Harold Rugg, it has been called to the attention of the editors. Board members of District 76 took such action two months ago and, in reporting the happening, the impression was given that their decision covered the city schools of all Evanston. District 75 and the township high school district have reported no action on the controversy.

A statement released by the American Committee for Democracy and Intellectual Freedom, bearing on the nation-wide discussion of social science and history textbooks, appears on page 66 of this issue.

SPAL DOES 3 JOBS AT ONCE!

Spal cleans by new Expurging Action

Spal gives floors a Lustrous Polish

Spal leaves a film of Surface Protection

MAINTAINING school floors correctly isn't the long, costly job it used to be. With Spal Liquid Scrub Compound you can now clean the floor, give it a lustrous polish, and leave a film of surface protection that reduces the number of necessary cleanings. You do *all 3 jobs* at the same time, in *one,* instant-action operation.

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VISUAL EDUCATION

Eastman Changes Policy

A number of the Eastman classroom films will be available for rental from the kodascope libraries division of Eastman Kodak Stores, Inc., 256 Madison Avenue, New York, it has recently been announced. Formerly, Eastman films were available through purchase only.

Visual Aid Withdrawn

Principals of New York City schools have been informed that, owing to budgetary curtailment, the state education department is no longer in a position to lend lantern slides and other visual aid materials to the schools.

Films in Review

FOOD AND GROWTH. 16 *mm., silent.* 400 *feet.* 1 *reel.* 11 *minutes. Eastman Teaching Films, Inc. Subject: biology or general science. Grades: later elementary or junior high school. Rating A.*

Three white rats, Java, Sweetie and Samson, have added the following substances to their diets: Java gets coffee in addition to her regular meal, Sweetie gets candy and Samson gets milk. The film shows the placing of the rats in cages, marking them and naming them. Their weight is recorded before the additions to their diets are made.

After a period of time the rats are removed and reweighed and graphs are drawn to show the changes that have taken place. The rations are changed. Before the change, Java is restless, Sweetie searches for more satisfying food and Samson sleeps soundly. All losses and gains are shown on a large graph. From this graph conclusions are made concerning the value of certain foods.

This is a highly entertaining film. The photography is good and there is a high degree of motion. It is carefully planned and well motivated. It should be an excellent film for this type of work.—*Reviewed by* WILLIAM O. MAYROSE.

NEW VOICE HIGHWAY. 16 *mm., sound.* 400 *feet.* 1 *reel.* 10 *minutes. Bell Telephone Company. Subject: general science, social studies, business, chemistry and physics. Grades* 7 *to* 12. *Rating B.*

Telephones are common to nearly all communities in the United States, yet comparatively few people have seen beyond the mouthpiece and the receiver to the tremendous equipment and personnel that are responsible for this widespread service. "New Voice Highways"

gives a complete picture of the construction of the cable without which modern city telephone service would be impossible.

The picture shows that the buildings in modern cities make overhead wires impossible. Wiring must be underground with the result that the multiplicity of telephone connection wires must be built and insulated to stand periods of long service and resistance against deterioration resulting from moisture. This film shows the construction of these cables from start to finish. The careful checking for broken wires is shown at each stage of construction and the final check before the completed cable is allowed to go into service. Cross-section pictures show the process of covering the wires with molten lead under a pressure of 28,000 tons.

The pictures are usually clear although some of the scenes are too dark to distinguish the details. The sound medium is a little too rapid and sometimes hard to hear. The effort to concentrate on both the photography and the indistinct sound is too great.—*Reviewed by* PAUL V. THORNLEY.

Film Releases

Trees to Tame the Wind—The story of 14,000 miles of field windbreaks and shelterbelts of the Prairie States forestry project where farmers are cooperating with the U. S. Forest Service in an unusual tree planting program. 16 and 35 mm., sound. 1 reel. Office of Motion Pictures, U. S. Department of Agriculture, Washington, D. C.

How Children Cane Chairs—The advantages of constructive activity in a summer playground program are indicated. The procedures followed in chair caning are shown in close-up, step by step, as done by one of the children. 16 mm., silent. ½ reel. Harmon Foundation, Inc., 140 Nassau Street, New York City.

Food Series: Vitamin B_1—The film shows the effect of deficiency of vitamin B_1 on pigeons and young rats. Also shown are the results of extreme vitamin B_1 deficiency in human beings, *i.e.* beriberi, and the effect of a balanced diet in curing this disease. 16 mm., silent. 1 reel. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

The Story of Coal—This film tells how coal is formed through the ages; the mining processes; the regions in which it is found, and its uses in the business world. 16 mm., sound. 400 feet. Knowledge Builders Classroom Films, McCrory Studios, 130 West Forty-Sixth Street, New York City.

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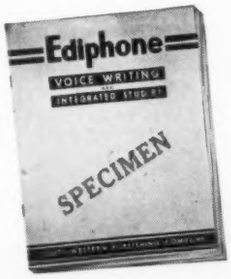

EDISON
VOICEWRITER
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On the Air During June

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System, the Mutual Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Daylight Saving Time. Watch listings for your local outlets.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Sundays

11:30 a.m.-12:00 noon—Music and American Youth (NBC Red).

12:15-12:30 p.m.—I'm an American. A series devoted to expositions by distinguished naturalized Americans of the privileges and responsibilities of the democratic way of life (NBC Blue).

1:30-2:00 p.m.—On Your Job. Dramas of America's work and workers, based on research by Frank Ernest Hill of the American Association for Adult Education (NBC Red).

1:30-2:00 p.m.—Sundown on the Veldt. Josef Marais in folk songs of the African Bushveld (NBC Blue).

1:30-2:00 p.m.—March of Games (CBS).

2:15-2:30 p.m.—Foreign Policy Association Program (NBC Blue).

2:30-3:00 p.m.—University of Chicago Round Table (NBC Red).

3:00-4:30 p.m.—Columbia Symphony Orchestra, conducted by Howard Barlow (CBS).

6:30-7:00 p.m.—N. Y. A. Sunday Symphony (NBC Blue).

8:00 p.m.—Columbia Workshop. Produced by Douglas Coulter, CBS director of broadcasts.

Mondays

10:30-11:00 p.m.—Cavalcade of America (NBC Red).

Tuesdays

2:00-2:30 p.m.—United States Army Band. Capt. Thomas F. Darcy, conductor (NBC Blue).

3:45 p.m.—American Transition (CBS).

9:30-10:00 p.m.—Invitation to Learning, Huntington Cairns, chairman (CBS).

Wednesdays

3:45 p.m.—Children Also Are People (CBS).

8:00-8:30 p.m.—Quiz Kids. These children from the schools of Chicago and vicinity, all under 15, reveal an amazing fund of information (NBC Blue).

Thursdays

12:05 noon-12:15 p.m.—Conservation Reporter (MBS).

3:45 p.m.—Adventures in Science. This program is planned in conjunction with Science Service (CBS).

6:30-6:45 p.m.—Speaking of Liberty, Rex Stout, chairman. Authors, editors and journalists discuss phases of democracy and its function (NBC Red).

9:35-10:30 p.m.—America's Town Meeting of the Air (NBC Blue).

Fridays

3:45 p.m.—Exploring Space (CBS).

11:15-11:30 p.m.—The Story Behind the Headlines. Produced in cooperation with the American Historical Association. Cesar Saerchinger, commentator (NBC Red).

Saturdays

12:00 noon-12:25 p.m. — American Education Forum. Designed to interest laymen as well as educators (NBC Blue).

12:30 p.m.—Highways to Health (CBS).

1:00-1:30 p.m.—Let's Pretend. Nila Mack (CBS).

2:30-3:00 p.m.—Of Men and Books. Prof. John T. Frederick, Northwestern University (CBS).

5:00-5:30 p.m.—The World Is Yours. Produced in cooperation with the U. S. Office of Education and the Smithsonian Institution (NBC Red).

7:00 p.m.—People's Platform. Round table discussion of social, economic and political problems. Lyman Bryson, chairman (CBS).

7:00-7.30 p.m.—Defense for America. Produced by National Association of Manufacturers, covering all phases of defense production (NBC Red).

8:15-8:30 p.m.—Man and the World. Produced in cooperation with the Chicago Museum of Science and Industry and the American Museum of Natural History of New York. A new series devoted to the men of science and their achievements (NBC Blue).

9:30-10:30 p.m.—NBC Summer Symphony Orchestra (NBC Blue).

[1]Except Sunday.

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GUIDANCE

Guidance for Graduates

High school graduates who are confronted with the problem of what to do next will be offered advice and assistance at the educational guidance clinic which will be held at Allegheny College, Meadville, Pa., June 22 to 28. The program of the clinic will include lectures, discussions, inventory tests of skill and personalities, and conferences with trained guidance counselors. The fee for the clinic will be $20, which will include the cost of meals, accommodations, tests and a thorough physical examination.

NATIONAL DEFENSE

What Junior Colleges Think

What students representing a group of more than 235,000 young people of junior college age in 44 states, as well as their leaders, think of problems facing the country today is revealed in results of a nation-wide poll on defense recently conducted by the A.A.J.C.

Both students and administrators favor all possible aid to Britain and disapprove a negotiated peace now between the European belligerents. By an overwhelming majority, they oppose entrance of the United States into the European war as an active fighting agent.

Both groups feel that labor union strikes in defense industries should be outlawed and that military service for college students under the Selective Service Act should be deferred until after graduation from college.

Strong opposition was voiced to the 50 per cent cut in the civilian pilot training program recommended in the budget now before Congress. Last year more than 5000 pilots were trained under this program in 200 junior colleges.

Coming Meetings

June 19-21—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.
June 20-21—Ohio Education Association, Cedar Point, Ohio.
June 22-July 13—California Adult Education Workshop, Mills College, Calif.
June 29-July 3—National Education Association, Boston.
July 8-12—Association for Childhood Education, Child Study Conference, Oakland, Calif.
Oct. 9-11—Utah Education Association, Salt Lake City.
Oct. 16-18—Wyoming Education Association, Cheyenne.
Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.
Oct. 22-25—New Mexico Educational Association, Albuquerque.
Oct. 23-24—Minnesota Education Association, Municipal Auditorium, St. Paul.
Oct. 23-24—New Hampshire State Teachers Association, Nashua.
Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.
Oct. 24-25—Maryland State Teachers Association, Baltimore.
Oct. 29-31—West Virginia State Education Association, Charleston.
Oct. 29-31—North Dakota Education Association, Minot.
Oct. 29-31—Maine Teachers Association, Bangor.
Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.
Nov. 6-8—Conference of Food Service Directors, New York City.
Nov. 6-8—Iowa State Teachers Association, Des Moines.
Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.
Nov. 7-9—New Jersey Education Association, Atlantic City.
Nov. 13-15—Arizona Education Association, Phoenix.
Nov. 18-21—Virginia Education Association, Richmond.
Nov. 20-22—Texas State Teachers Association, Houston.
Nov. 26-29—Missouri State Teachers Association, St. Louis.
Dec. 29-31—Pennsylvania State Education Association, Harrisburg.
Dec. 29-31—Illinois Education Association, Chicago.
Feb. 21-26—American Association of School Administrators, San Francisco.

HOW TO TURN BUDGET MOUNTAINS INTO MOLEHILLS

American Desk Company Seats in the auditorium, Conroe Junior High School, Conroe, Texas. Their comfort and long life are assured with REDO Upholstery.

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CHASE REDO Upholstery is practically certain assurance of comfort wherever used—for its use as a cover is a clear indication of sound, honest seat construction.

Many Superintendents will tell you that REDO is budget protection in other ways, too. With REDO covered seating, pupils pay more attention to educational activities—squirm and fidget less—get more of their parents' money's-worth out of schooling.

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NAMES IN NEWS

Superintendents

JOHN A. YOUNG has been appointed superintendent of schools at Bridgeport, Conn., to succeed WORCESTER WARREN. Mr. Young assumed his duties as acting superintendent on May 1, at which time Mr. Warren was given a leave of absence with pay until the expiration of his contract on July 31.

DR. ERNEST E. OERTEL, superintendent of schools at Hemet, Calif., will replace DR. JOHN H. NAPIER JR., as head of Placer Union High School and Junior College, Placer, Calif. Doctor Napier has accepted the position of city superintendent of schools, Tulare, Calif.

T. J. REITH, superintendent of schools, Farragut, Iowa, has notified the board of education that he will resign at the close of the school year in order to accept a position as personnel director of 17 counties in southwest Iowa for the Denoyer-Geppert Company, Chicago.

V. E. GLENN, superintendent of Glennville High School, Glennville, Ga., has been named superintendent of Sylvania High School, Sylvania, Ga., to succeed C. L. MILLER, who resigned recently.

G. FLINT TAYLOR, formerly principal of Wytopitlock High School, Farmington, Me., has accepted a position as principal of New Sharon High School, New Sharon, Pa. He succeeds PAUL S. LYMBURNER, who resigned to become assistant principal of Dixfield High School, Dixfield, Me. GIRARD QUILLIER has been named successor to Mr. Taylor.

PAUL A. REID has been named superintendent of the graded schools, Elizabeth City, N. C. Mr. Reid, who was principal of Needham Broughton High School, Raleigh, N. C., succeeds EDGAR E. BUNDY, who submitted his resignation to take effect at the end of the school year.

KENNETH G. MARTIN was appointed superintendent of Oregon Blind Trades School, Portland, to succeed LINDEN MCCULLOUGH.

B. F. MINOR, superintendent of schools of Levelland, Tex., will succeed JOHN S. WHITE as head of the Grandfalls-Royalty school system, also in Texas.

Private Schools

RAYMOND B. JOHNSON has been elected headmaster of the University School, Cincinnati, to succeed CHARLES L. S. EASTON, who resigned in February. Mr. Johnson has been in charge of the Utica Country Day School, Utica, N. Y., since 1932.

B. C. CATE, headmaster of Cook Academy, Montour Falls, N. Y., will resign on June 20 to enter the field of insurance. He has been affiliated with the academy since 1910.

Principals

ESTEN HOLT, who has been supervising principal of schools, Piketon, Ohio, for the last sixteen years, recently submitted his resignation. PAUL SMITH was named to fill out Mr. Holt's term and was given a two year contract as supervising principal, contingent upon his not being called for military service.

C. C. CADENHEAD, for the last three years principal of the Zebulon School, Zebulon, Ga., has been elected principal of R. E. Lee High School, Thomaston, Ga.

M. M. PLAYER, principal of Williston-Elko High School, Williston, S. C., and coach of the school's athletic teams, resigned on April 1. He has accepted a position in the state department of labor.

GEORGE R. RAYNOR, principal of Chautauqua Central School, Chautauqua, N. Y., since 1916, will retire at the end of the school year.

HOWARD L. SMITH, supervising principal of Washington Township high schools, Pennsylvania, has been called for active duty in the Navy Reserve Corps.

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The big, two-compartment oven provides double capacity with no more gas.

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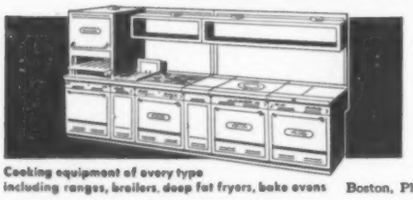

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ARTHUR T. TALMADGE, principal of Forest Park Junior High School, Springfield, Mass., will retire this year after forty-eight years of service.

AUGUSTUS LUDWIG, principal of Far Rockaway High School, Far Rockaway, N. Y., will become head of the new Fort Hamilton High School, Brooklyn, N. Y., when it is opened in September.

DR. W. BAY IRVINE, principal of Kittanning High School, Kittanning, Pa., has resigned. He will assume an administrative position at Marietta College, Marietta, Ohio.

WILLIAM O. PORTER has been named by the board of education of McConnelsville, Ohio, to succeed MRS. EVELYN TRUE BUTTON as principal of the high school.

ROBERT O. HALL, principal of Streetsboro High School, Streetsboro, Ohio, has resigned to accept a teaching position in the Cleveland public schools. IRVING CLARK, a teacher at Streetsboro, has been elevated to the principalship.

JOHN H. GORBY, principal of Magnolia High School, New Martinsville, W. Va., will retire at the end of the school year. Mr. Gorby has been an outstanding figure in educational work in West Virginia for forty-seven years.

P. C. MORGAN has resigned his position as principal of Slocomb High School, Slocomb, Ala., to accept a civil service position in Atlanta, Ga.

GERTRUDE A. LEOPOLD, principal of Akron High School, Akron, N. Y., for the last ten years, has submitted her resignation. Miss Leopold has been affiliated with the Akron school system since 1905.

HAROLD N. WHITE, who has been on a year's leave of absence as principal of Blair High School, Blair, Neb., submitted his resignation at a recent meeting of the board of education. J. S. THOMPSON, who has served in Mr. White's stead during the year, will continue as principal.

In the Colleges

DR. PAUL F. DOUGLASS, 37 year old member of the Vermont legislature, took office on May 1 as president of American University, Washington, D. C.

W. F. O'DONNELL has been chosen president of Eastern State Teachers College, Richmond, Ky., to succeed DR. HERMAN LEE DONOVAN. Mr. O'Donnell has been superintendent of Richmond schools since 1926.

Deaths

EDMUND S. JAMIESON, for seventeen years headmaster of Howe Military School, Howe, Ind., died recently.

WILMER K. GROFF, superintendent of public schools at Berwyn, Pa., since 1930, died in April.

J. BYRON TARNEY, superintendent of schools at Goffstown, N. H., died recently after a brief illness. Mr. Tarney had been head of the Goffstown district schools since 1923.

DR. GEORGE WHEELER, former associate superintendent of schools in Philadelphia, died recently at the age of 75. Doctor Wheeler established the first junior high school in Philadelphia.

DR. JOHN A. SCHAEFFER, president of Franklin and Marshall College, Lancaster, Pa., died recently of a cerebral hemorrhage. He had been head of the college since 1935.

MRS. CARRIE BACH, principal of Lyons State Graded School, Baraboo, Wis., died April 21 after a long illness.

MORRIS LAMAR BRELAND, for four years principal of Center Hill High School, Center Hill, Miss., died recently of a heart attack.

DR. HAROLD F. DOW, superintendent of schools at Danbury, Conn., died April 24 after a lengthy illness. Doctor Dow had been head of the Danbury school system since 1931.

ANTON O. IVERSON, principal of Central High School, Sheboygan, Wis., since 1939, died recently after an illness of several weeks.

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TRANSPORTATION

Who Shall Use Buses?

Public school buses in Kentucky can be used only to transport children to and from school or to carry school athletic teams to and from regularly scheduled athletic games, according to a ruling by W. Owen Keller, assistant attorney general. Wholesale violations of the Kentucky law by the transport of W.P.A. workers, parents of school children and employes of boards of education in the school buses had been reported.

PUBLICATIONS

Education in Cleveland

Cleveland public schools have organized a health program designed to help pupils who are endowed with good health to keep healthy and to assist those who have health problems in solving them, according to the annual report for the school year 1939-40 recently released by Supt. Charles H. Lake.

The handsomely illustrated report reviews the activities of elementary schools, junior and senior high schools, special schools and numerous special departments, including the bureau of educational research, the psychologic clinic and N.Y.A. unit.

Library for Teachers

A list of professional books for the libraries of elementary school teachers has been published by the faculty of Southern Oregon College of Education. The list has been selected and annotated especially to assist beginning teachers who wish to make use of their limited time and funds in improving their professional status.

Salaries Surveyed

The biennial survey of salaries paid in city school systems has recently been published in the Research Bulletin of the National Education Association The survey includes reports on the trends in salaries during the last decade; the range and distribution of salaries in 1940-41; comparisons between positions and levels, and intercity comparisons.

Seattle Reports Progress

The educational decade of 1930 to 1940 is attractively depicted in a progress report on the Seattle schools prepared by Supt. Worth McClure at the request of the board of education. It is effectively written and illustrated, establishing a new record for terse descriptive writing.

Population Predictions

The population of the United States will reach a peak of between 140,000,000 and 150,000,000 around 1970 and will begin to decline after that, according to a pamphlet, "What the New Census Means," by Stuart Chase recently published by the Public Affairs Committee, New York.

"In schools, at any rate," Mr. Chase states in his analysis of the population trend, "the next generation of children should have a better break than the past one. Where overcrowding has been a problem, pupils can now have enough desk room in smaller classes, unless budgets are too drastically reduced."

"Know Your Community"

A new study bulletin, "Know Your Community," has been issued by the U. S. Office of Education to aid citizen groups that want to understand the fundamentals of their community problems.

Before citizens can offer suggestions for cooperating in national defense preparations, according to Bess Goodykoontz, assistant U. S. commissioner of education, they should have a thorough knowledge of the resources of their own community. The questions outlined in the bulletin are designed to "serve as convenient pegs on which to hang the

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facts residents gather about their community so that they can scrutinize and interpret their findings as a basis for individual or group action," Doctor Goodykoontz states.

BUILDINGS

Iowa Looks at Rural Schools

A summary of the findings on a questionnaire sent to rural districts in Iowa that maintain elementary schools only has been released by the Iowa Department of Public Instruction. The following figures were obtained from the questionnaire: one room schools open, 8310; one room schools closed, 1545; two room schools open, 130; two room schools closed, 7; schools with electric lights, 1588; with telephones, 479; with room furnaces, 3430; with basement furnaces, 2485; with oil burning room heaters, 318; with oil furnaces, 37; with indoor toilets, 882; with pressure water supply, 185; without wells, 3814; number of stoves, 67, and number of circulating heaters, 26.

Fire Strikes Three Schools

Serious fires damaged or destroyed three schools in various sections of the country during the past few weeks. On April 12 a fire of unknown origin completely destroyed the six room Alpha consolidated grade school at Alpha, Ill. Unable to save any of the school's equipment, firemen directed their efforts toward preventing the flames from reaching the high school building, which is located about 150 feet to the north. Flames broke out twice in the high school but were extinguished before any damage was done.

A $20,000 fire damaged the Lincoln Grade School, Sedalia, Mo., on April 15. The center section of the 28 year old structure was gutted.

Canterbury Hall of Eastern Nazarene College at Wollaston, Mass., was destroyed by fire on May 1. Twenty students of the college fled from the building shortly before flames enveloped the entire structure.

SAFETY

Extinct Extinguishers

Outworn fire extinguishers are hazardous and should be discarded, a bulletin of the Safety Research Institute, New York City, pointed out recently. Although old extinguishers that have been properly maintained may still be serviceable, it is advisable to subject them to special tests to determine their fitness for use. Even fairly new equipment, if it has been subjected to corrosion, freezing or rough handling, may be defective and should be removed from service because it is uneconomical to try to repair it, the bulletin stated.

RADIO

Awards for School Broadcasts

At its annual meeting in Chicago, December 3 to 5, the School Broadcast Conference will again grant awards and citations to teachers for outstanding examples of the use of radio programs in class work. The contest, which closes November 1, will bring before in-service teachers examples of successful procedures in the use of programs that are now on the air.

Contestants are required to describe in not more than 100 words their approach to the inclusion of the broadcast in the class schedule and to describe as briefly as possible the follow-up activities of the program. The handbook page or paragraph describing the broadcast used must accompany the entry.

As in the past, the entries that win citations will be edited and published early in 1942.

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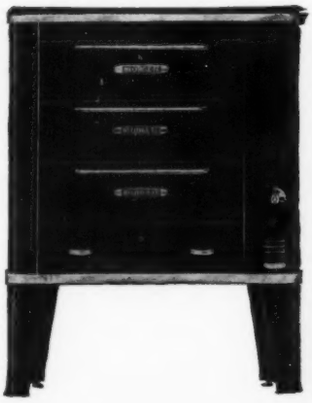

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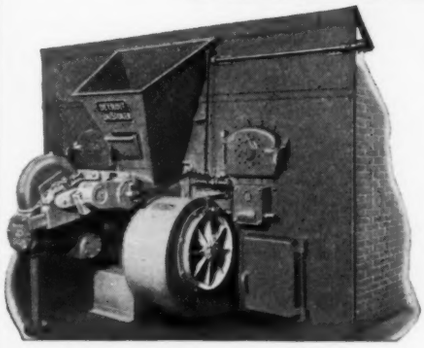

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The Bookshelf

General

READING AND PUPIL DEVELOPMENT. *Vol. II. Compiled and Edited by William S. Gray. Chicago: University of Chicago Press,* 1940. *Pp.* xi+355. $2.

THE PIVOTAL PROBLEMS OF EDUCATION. *An Introduction to the Christian Philosophy of Education. By William F. Cunningham. New York: The Macmillan Company,* 1940. *Pp.* xix+588. $3.

THE GALLIC WAR OF JULIUS CAESAR. *Translated Into English by Eugene I. Burdock. Illustrated by Fritz Kredel. New York: Noble & Noble, Publishers, Inc.,* 1940. *Pp.* xii+351. $1.25.

MATERIAL FACILITIES: *Needed in the Training of Intermediate Grade Teachers in Science. By Harry A. Cunningham. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* vii+162. $2.

UNITS OF WORK AND CENTERS OF INTEREST IN THE ORGANIZATION OF THE ELEMENTARY SCHOOL CURRICULUM. *By Sadie Goggans. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* vi+140. $1.60.

A STUDY OF OCCUPATIONAL ADJUSTMENT. *By Howard M. Bell. Prepared for the American Youth Commission. Washington, D. C.: American Council on Education,* 1940. *Pp.* xiii+277. $2.

STOPS. *A Handbook for Those Who Know Their Punctuation and for Those Who Aren't Quite Sure. Introduction by Robert M. Gay. Middlebury, Vt.: Middlebury College Press,* 1940. *Pp.* viii+37. $1.

NATIONAL GOVERNMENT AND EDUCATION IN FEDERATED DEMOCRACIES, DOMINION OF CANADA. *By James Collins Miller. Lancaster, Pa.: Science Press Printing Company,* 1940. *Pp.* xvi+676. $4.50.

LIABILITY FOR SCHOOL ACCIDENTS. *By Harry N. Rosenfield. New York: Harper & Brothers,* 1940. *Pp.* xvii+220. $2.

THE STANDARDIZATION OF TWO INTELLIGENCE TESTS. *By Mary Redmond and F. R. J. Davies. Wellington, C. 1, New Zealand: New Zealand Council for Educational Research,* 1940. *Pp.* xiii+129. *(Obtainable From Oxford University Press, New York City.)*

EVALUATING THE WORK OF THE SCHOOL. *Compiled and Edited by William C. Reavis. Chicago: University of Chicago Press,* 1940. *Pp.* ix+236. $2.

STAND FAST FOR FREEDOM. *By Lowell Thomas and Berton Braley. Chicago: John C. Winston Company,* 1940. *Pp.* iv+314. $2.

PACIFIC NORTHWEST PROBLEMS AND MATERIALS. *Prepared by Northwest Regional Council. Portland, Ore.: Northwest Regional Council,* 1940. *Pp.* 190. $0.50.

BRONSON ALCOTT, TEACHER. *By Dorothy McCuskey. New York: The Macmillan Company,* 1940. *Pp.* xiii+217. $1.90.

PRESIDENTIAL ELECTIONS. *From Abraham Lincoln to Franklin D. Roosevelt. By Cortez A. M. Ewing. Norman, Okla.: University of Oklahoma Press,* 1940. *Pp.* xiii+226. $2.50.

THE DICTIONETTE. *No. 7. By Hardin Lucas. New York: Codetutor Company,* 1940. *Pp.* 64. $0.10 *(Paper Cover).*

HIGH SCHOOL PRINCIPALS' ANNUAL REPORTS. *By George H. Armacost. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* ix+180. $2.

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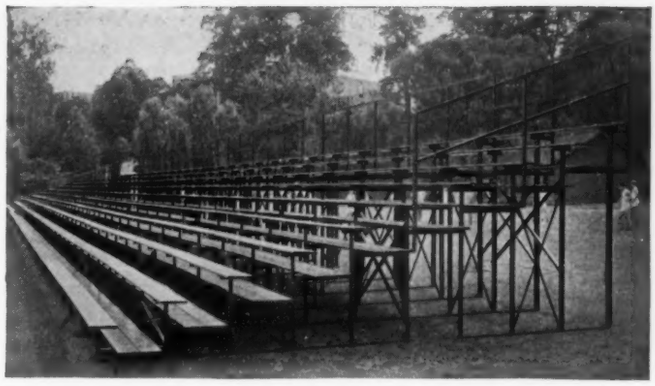

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AN ANALYSIS OF THE SPECIFIC REFERENCES TO NEGROES IN SELECTED CURRICULA FOR THE EDUCATION OF TEACHERS. *By Edna Meade Colson. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* x+178. $2.

ESSENTIALS OF VISUAL EFFICIENCY. *South Royalton, Vt.: Distinguished Service Foundation of Optometry,* 1940. *Single Copies,* $0.25; 10 for $2; 100 for $17.50; 1000 for $160. *Pp.* 68. *(Paper Cover.)*

PROCEEDINGS OF THE EIGHTEENTH ANNUAL MEETING. *By Ray L. Hamon. Nashville, Tenn.: National Council on Schoolhouse Construction, October* 1940.

COURAGE OVER THE ANDES. *By Frederick Arnold Kummer. Philadelphia: John C. Winston Company,* 1940. *Pp.* vii+251. $2.

POLLY KENT RIDES WEST: *In the Days of '49. By Robert McCulloch. Philadelphia: John C. Winston Company,* 1940. *Pp.* xiii+304. $2.

DIGEST OF SUBCOMMITTEE REPORTS: *Function and Scope of Public Education in the American Democracy Today, No.* 1. *Pp.* 63. *The Effect of Technological Development Upon Society, No.* 2. *Pp.* 138. *The Family in Present-Day Life, No.* 3. *Pp.* 45. *International Problems and Their Import, No.* 4, *Pp.* 117. *Attitudes Toward Authority, No.* 5. *Pp.* 70. *Relation of Government to Social Welfare, No.* 6. *Pp.* 37. *The Conservation of Natural Resources, No.* 7. *Pp.* 222. *Baltimore: Department of Education,* 1940. *(Paper Cover.)*

PLAYGROUND SURFACING. *By John T. Cate and Others. Pittsburgh: National Association of Public School Business Officials,* 1940. *Pp.* 56.

THE DEVELOPMENT OF PUBLIC RECREATION IN METROPOLITAN CHICAGO. *By Elizabeth Halsey. Chicago: Chicago Recreation Commission,* 1940. *Pp.* xii+334. $1.

PUBLICITY PROBLEMS. *Edited by Stewart Harrel. American College Publicity Association,* 1940. *Pp.* 182. $3 *(Paper Cover).*

THE CURRICULUM CLASSIFICATION OF JUNIOR COLLEGE STUDENTS. *By Henry Irving Weitzel. Pasadena, Calif.: Pasadena Junior College Bookstore,* 1940. *Pp.* 88. *(Paper Cover.)*

TENTH-GRADE ABILITIES AND ACHIEVEMENTS. *By Elden A. Bond. New York: Bureau of Publications, Teachers College, Columbia University,* 1940. *Pp.* 67. $1.60.

THE CURRICULUM OF MODERN EDUCATION. *By Franklin Bobbitt. New York: McGraw-Hill Book Company, Inc.,* 1941. *Pp.* xii+419. $2.75.

Textual

PHYSICS FOR SECONDARY SCHOOLS. *Revised Edition. By Oscar M. Stewart and Burton L. Cushing. Boston: Ginn and Company,* 1941. *Pp.* viii+760. $1.80.

TIME OUT FOR LIVING. *By E. DeAlton Partridge and Catherine Mooney. Chicago: American Book Company,* 1941. *Pp.* x+662.

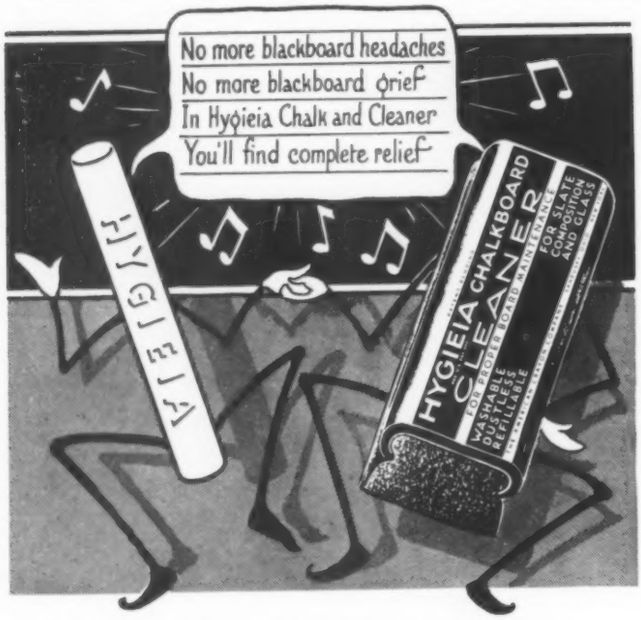
STANFORD ACHIEVEMENT TEST: *Forms* D E F G H. *By Truman L. Kelley, Giles M. Ruch and Lewis M. Terman. Primary Battery, Intermediate and Advanced Batteries, Complete and Partial. Separate Tests in Arithmetic and Reading. Yonkers-on-Hudson, N. Y.: World Book Company,* 1941.

HEALTHFUL LIVING. *By Jesse F. Williams. Third Revised Edition. New York: The Macmillan Company,* 1941. *Pp.* x+600. $1.60.

EVERYDAY SPEECH. *By Harley Smith, Clara E. Krefting and E. E. Lewis. Boston: American Book Company,* 1941. *Pp.* xvi+479.

PUBLIC SCHOOL FINANCE. *By Paul R. Mort and Walter C. Reusser. New York: McGraw-Hill Book Company, Inc.,* 1941. *Pp.* xviii+569. $3.75.

BASKETBALL FOR GIRLS. *By Wilhelmine E. Meissner and Elizabeth Yeend Meyers. New York: A. S. Barnes Company,* 1940. *Pp.* 87. $1.



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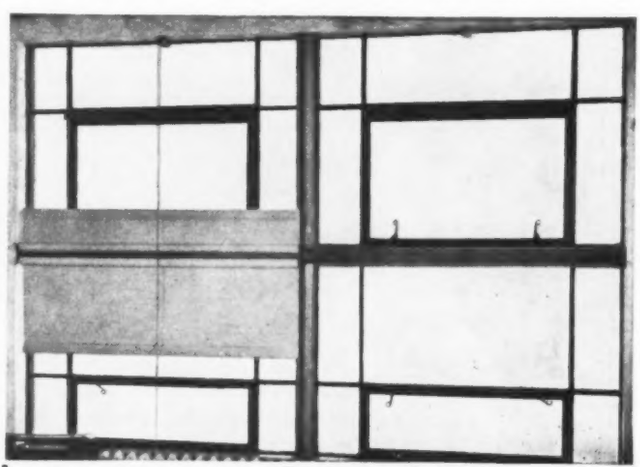

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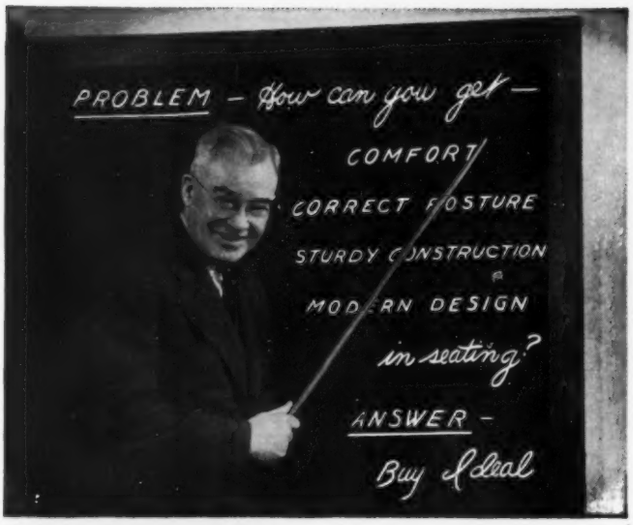

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Trade News

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Vocational School Equipment

Lyon Metal Products, Inc., Aurora, Ill., offers assistance to vocational schools and departments that are faced with the necessity of stepping up their programs under the national defense program in a recently issued booklet that describes and illustrates the types of shop and tool storage equipment which are found in modern industrial plants and which have been adapted for educational programs.

Flag Poles

Stewart Iron Works Company, Cincinnati, has issued a folder describing a full weight hot galvanized steel flag pole that is said to be especially suitable for schools. The pole is equipped with a hooded, nonjamming halyard pulley to assure easy operation at all times.

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A new streamlined version of the see-saw, which will be known as the "stratosphere," has been added to the line of playground equipment manufactured by J. E. Porter Corporation, Ottawa, Ill. The altitude of the "stratosphere" is higher than that reached by the conventional see-saw. Other innovations include a design for the seats that keeps them parallel to the ground during the entire arc of travel, and a set of levelizer bars that tends to equalize any differences in weight between the two riders.

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A new, approved hydrostatic pump for testing fire extinguishers, engines, fire hose and sprinkler systems has recently been announced by American-LaFrance and Foamite Corporation, Elmira, N. Y. The pump reveals the condition of the extinguisher by hydrostatically testing the shell and hose for strength.

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A. B. Dick Company, 720 West Jackson Boulevard, Chicago, has introduced a new mimeograph illuminated drawing board. The board is said to be capable of instant adjustment and can be placed at any angle. A floor model that stands on a three point base, the board is designed for increased operating efficiency and comfort.

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Drill Sharpener

A new grinding attachment for sharpening drills has been announced by Delta Mfg. Co., 600 East Vienna Avenue, Milwaukee. A setting attachment with an accurate scale permits micrometer settings that ensure evenly ground lips so that the drill runs true.

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FOR THE 4th "R"

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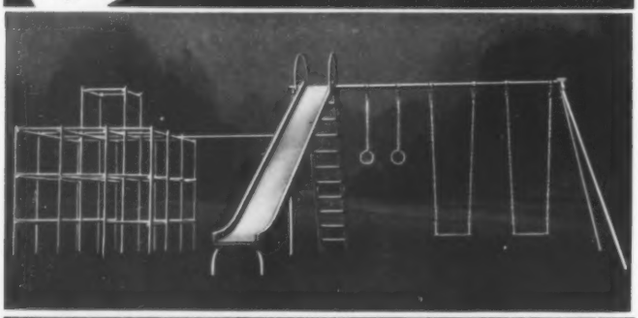

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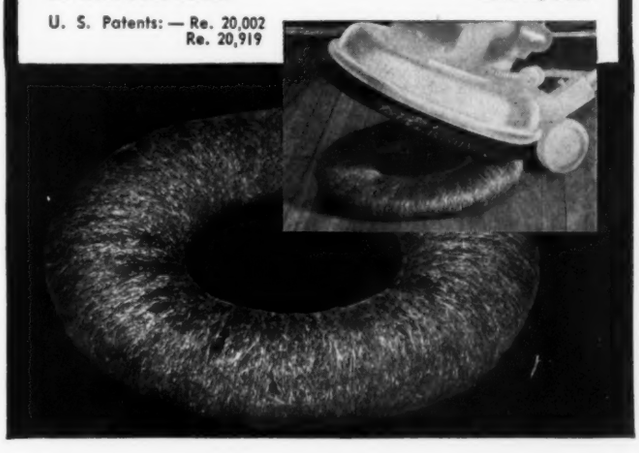

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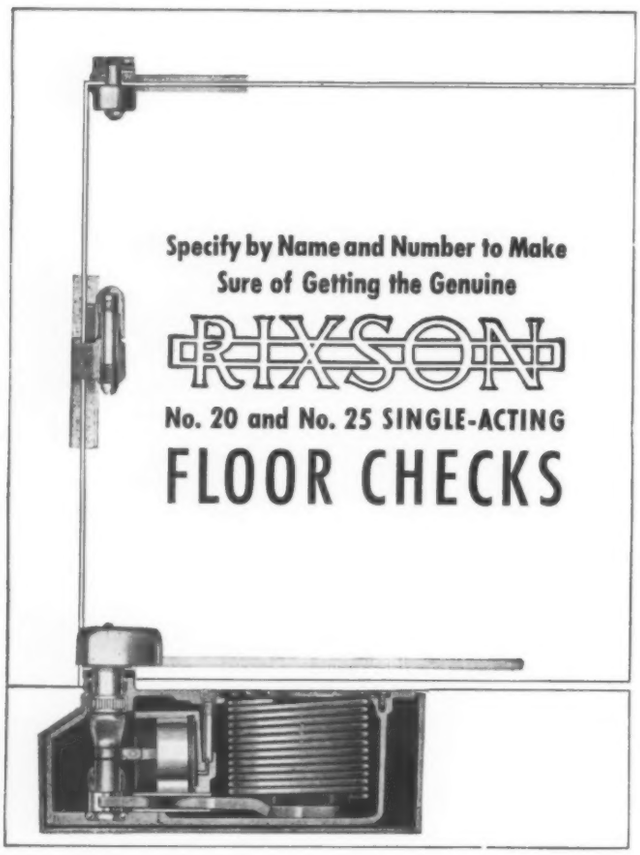

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